



Sustainability Strategy Advisory Group (SSAG)

Tuesday 8 October 2019, 2pm

Ochil Room, Charles Stewart House

AGENDA

- 1 Minute** **A**
To approve the minute of the previous meeting on 24 June 2019
- 2 Matters Arising**
To raise any matters arising not covered on the agenda or in post-meeting notes
- 3 Proposal for a Circular Economy Innovation Centre** **B**
To note and discuss a paper from the SRS Business Development Analyst – Circular Economy
- 4 Responding to the Climate Emergency – Next Steps** **C**
To note and discuss a paper from the Director of SRS
- 5 The Government’s Programme for Scotland 2019-20** **D**
To note and discuss a briefing from the Climate Policy Manager
- 6 Sustainability & Festivals Project** **E**
To note and discuss a paper from the Student Engagement, Events & Reporting Programme Manager
- 7 Energy Quarterly Report** **F**
To receive a report from the Head of Energy & Utilities Management
- 8 SRS Programmes Quarterly Report** **G**
To receive a report from the Deputy Director of SRS
- 9 Waste, Reuse & Recycling Quarterly Report** **H**
To receive a report from the Waste Manager
- 10 Travel & Transport Quarterly Report** **I**
To receive a report from the Travel & Transport Manager
- 11 Any Other Business** **Verbal**
To consider any other matters from Group members

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MINUTE OF A MEETING of the Sustainability Strategy Advisory Group held in 2.01 Geography (Old Infirmary) on Tuesday 24 June 2019.

- Members:** Dave Gorman, (Convener) Director of Social Responsibility & Sustainability
Michelle Brown, Head of SRS Programmes
Michelle Christian, Director - Property & Residential Services
Emma Crowther, Transport & Parking Manager
Dean Drobot, Head of Utilities & Energy Management
Grant Ferguson, Director of Estates Operations
Kate Fitzpatrick, Waste & Recycling Manager
David Jack, Energy & Utilities Operations Manager
George Sked, Director of Procurement
Rosheen Wallace, Students' Association VP Community
Hugh Edmiston, Director of Corporate Services (ex officio)
Gary Jebb, Director of Estates (ex officio)
- In attendance:** Sarah Ford-Hutchinson, SRS Communications Manager, for item 6
Matthew Lawson, SRS Programmes Manager, for item 8
Alexis Heeren, Supply Chains Programme Manager, for item 11
- Apologies:** Michelle Christian; Emma Crowther; Kate Fitzpatrick; George Sked;
Gary Jebb (ex officio); Hugh Edmiston (ex-officio)

1 The minute of the meeting held on 11 December 2018 was approved as a correct record. **A**

2 Matters Arising

Quarterly reports on Waste and Transport were to be re-included from this meeting, enhancing awareness of developments within these areas.

Action – KF to report back on changes to contract costs at the next meeting in October.

Post-meeting note: *The new contract was awarded to Biffa (who were our incumbent contractor) and the contract start date was 22 April. Based on an indicative pricing model which was used in the Tender process (a 'typical' week collections), the new contract is approximately 20% less than the previous contract.*

Members noted clarification from the Deputy Secretary, Strategic Planning on the difference between a formal University 'policy', which needed to be approved by the University Executive and Court, and a 'procedure', which SSAG and similar groups could approve directly.

3 Climate Change: Update on External Developments & UoE Response **B**

SSAG noted this version of a paper previously shared with the Principal, senior leadership team, and SRS Committee, outlining a range of recent developments around the climate emergency and the University's response. UoE was on track to deliver its 2025 targets, but would need to do more to meet its 'Zero by 2040' objective, given the current rate of growth and intensity of business travel.

The issue had been discussed at length at the Strategic Away Day on 13th June, with all 25 senior leaders present agreeing that 'Zero by 2040' was a core goal for the University. As a result, UoE's senior leadership was reconsidering the RELCO proposals, looking at issues around curriculum reform, transport and waste, and was more open to action on aviation, including a potential internal levy on flights, to be funnelled into carbon-offsetting projects. This was an excellent opportunity for the group, which would come forward with ideas in due course. Though the scale and timing were still to be decided, the RELCO land option in particular offered strong co-curricular and living lab opportunities, including eco-restoration, land management and rewilding. It was also noted that in due course proposals on energy and heat would need to be brought forward.

4 Staff and Student Sustainability Champions and SRS Changemakers

C

When the SRS Department was formed in 2014 it inherited a network of roles and champions. With sustainability as part of every staff member's role, the department was considering how best to empower, support, and inspire staff at all levels, as well as support student sustainability champions.

Previously there had been a focus within staff networks on energy savings, in line with CSG's 10% reduction target. Growing the energy coordinator network had been challenging, with numbers stalling around 150 against a target of 300. Following manager review, the next step would be the launch, during Welcome Week, of a reconfigured network of 'Sustainability Champions', to include both staff and students, with a broader sustainability focus. This would replace the current energy and waste coordinator networks. Anticipated benefits included enhanced knowledge and skills development for participants, streamlined engagement channels, and increased capacity to take action on sustainability issues. Activities around the launch would continue over the summer, including further reflection on the title 'SRS Champions' and how best to market the new network. SRS would consult and secure feedback to shape the future of the scheme.

SSAG endorsed the proposal, recognising the efficiencies it offered. Members felt it was timely, and took the correct approach. It would be particularly valuable in creating opportunities for students from different Schools to work together. SSAG acknowledged the efforts that had gone into securing academic credit for participants in the ESSA Project and the Edinburgh Award, and hoped to see an increase in the number of students taking up these kinds of opportunities.

5 Sustainability Policy – Preliminary Draft

D

This draft provided an update to the 2000 Policy, reflecting substantial progress achieved, and bringing together UoE ambitions and objectives in this area. The finalised policy would be a powerful communication tool and should lead to efficiencies, replacing numerous policies on sub-issues. The Policy would align with the goals and cross-cutting themes of the Strategic Plan. Next steps would include consultation with staff and students, including the new Sustainability Champions network, with sign off by the Students' Association and SRS Committee planned for the autumn.

SSAG endorsed the proposal for a one to two page Sustainability Policy, comprising both social and environmental aspects, to be developed in partnership with the Students' Association. Members felt that the process of updating the policy would generate valuable discussions and the finished document would be a useful guide demonstrating how these issues were connected, and explicitly setting out expectations of UoE staff and students. Increasingly there was demand for a brief policy statement to include in

tenders and research bids, issue to contractors, and for use in external ranking processes such as the People & Planet Green League.

Action – MB to include the wording ‘in our operations and investments’ in section 1, to reflect the breadth of activity.

Action – MB to work with the VP Community to carry out a consultation process with the Students’ Association.

Action – All members to send their comments to MB.

6 **#ZeroWasteUoE Campaign**

E

The SRS Communications Manager, in attendance for this item, briefed the Group on an upcoming behaviour change campaign around reduction of avoidable waste, increase in reuse, and improved recycling practice, which would be key in achieving the goal, laid out in the [Waste Strategy](#), to become a zero waste University. Based on nudge theory, the focus would be on individual action on resource efficiency. Next steps would include production and piloting of campaign materials over the summer, including social media graphics, clearer guidance on recycling, and case studies and blogs highlighting good practice, with launch to the whole University community planned for the autumn.

SSAG welcomed the campaign, recognising waste reduction as a key University priority, and seeing the value of engagement to ensure this was reflected in the culture on the ground. The campaign would help communicate what the University’s vision of zero waste would mean on a day to day basis, prompting staff and students to consider what actions they could take. Members noted that there was no need to create new initiatives to reduce waste – existing systems were in place in Estates and SRS. The challenge was in changing behaviours.

Action – SFH to come back and report on progress at the next meeting.

Post-meeting note: #ZeroWasteUoE update carried forward to December’s meeting.

7 **Energy Quarterly Report**

F

The Head of Energy & Utilities Management updated the Group on strategic priorities and activities at Q4. Work was ongoing to input data into the Optima visualiser tool in order to generate management reports in a format that was easy to understand and share with different groups. Work breaking reporting down to College level was almost complete. It would then be taken to building level. Most of the data was in place to allow building typology reporting. This would enable Estates to differentiate how energy was being used across campus, and inform the main user groups about their energy impact. An ‘Energy Masterplan’ was in development, with funding support from Zero Waste Scotland. The final report, due in July, should contain significant output of interest to SSAG. Overall, significant investment was being made in the area and energy use was reducing, but not currently at pace to meet set targets.

Members welcomed the sample report, noting that Optima Energy would be producing functional KPI reports by the end of 2018/19. This timeline aligned well with the Finance Transformation programme. The reports would be particularly useful when communicating and engaging with building users. SSAG noted the issues around challenging energy use, including a similar push back as when challenging generation of avoidable waste.

Action – DD to report on key outcomes from the Energy Masterplan at October’s meeting.

Action – DD to revisit the standard template to re-include and enhance visualisation of quarterly comparisons.

Action – DD to present the appendices in future reports rotated to landscape format for ease of viewing.

Action – DD to share report with CSE Sustainability Intern Jasmine Hussain.

The Convener thanked the Energy & Utilities team for producing the report, and expressed disappointment at the absence of quarterly reports from Waste and Transport, given the importance of the Group having an overview of developments in these areas.

8 SRS Reporting – Plans for 2019

G

The Head of SRS Programmes outlined plans for developing the University's Social Responsibility and Sustainability Report for 2019. This more detailed stand-alone report complemented reporting on social responsibility and sustainability issues integrated within the Annual Report and Accounts. The SRS Department collated reporting information from colleagues across professional services and academic schools. Key information providers would be contacted from July. In November a final draft would be shared with internal and external colleagues for feedback on UoE's performance against its objectives, as well as on the overall format and feel of the report. Publication of the final version was scheduled for December 2019.

Action – MB to share a mock-up of the SRS online platform for feedback.

SSAG anticipated strong performance on energy and carbon, with areas for improvement around transport and business travel. Members discussed the percentage of the University's power consumption coming from renewables. It was estimated that around 30% of UoE electricity was from renewable sources.

9 Biodiversity Strategy

H

In the absence of the Climate Policy Manager, the Director of SRS presented the paper. Ownership of the Strategy was with Estates, with support from SRS. The Strategy combined consideration of physical campus biodiversity with research, learning and teaching.

Members warmly welcomed the strategy as addressing an important issue, while raising some concerns about excessive repetition within the draft. It was felt to be a mixture of strategy, policy and programme plan and could benefit from further refining before going to University Executive for sign off. Further discussion on resourcing was needed, particularly on the amount of communications work that would be required. SSAG noted missed opportunities to use inter-building spaces as areas for study and relaxation, and asked that the impact of improved biodiversity on mental wellbeing be highlighted further in the final version. Biodiversity also had strong links to welfare and the student experience.

SSAG approved the programme outlined in the draft, subject to further discussions on resourcing, particularly the impact on Estates Development managers.

Action – EVM to remove extraneous content, make the draft clearer, further unpack the implications, and make the carbon benefits more prominent.

10 Carbon Reporting Verification and Assurance and Next Steps

I

In the absence of the Climate Policy Manager, the Director of SRS presented this paper outlining carbon reporting verification of the University's footprint for 2017-18, as entered into the Ecometrica platform, and undertaken on an annual basis by Sweco.

SRS had discovered errors in the data for business travel and worked to resolve the issue. While initial data appeared to point to a rise in emissions from business travel, recalculation indicated a decrease from emissions reported in 2016-17. An analysis report was being put together over the summer to compare this year's figures with the previous, and findings would be shared with SSAG.

Members confirmed they were satisfied with the verification report.

11 Theory of Change for SRS in Supply Chains

J

The Supply Chains Programme Manager, in attendance for this item, presented this paper outlining a 'theory of change' for how UoE could make a positive impact on global supply chains through its operational procurement as well as learning, teaching and research. The exercise had highlighted the University's ability to leverage supply chains through non-procurement activities such as investment, research and teaching. It would be used as a tool to inform future work in the area.

SSAG recognised the difficulty of reporting on the impact of the University's work on sustainable procurement, given the complexity of global supply chains, and acknowledged the value of developing a 'theory of change' to articulate how these activities advanced sustainable supply chains, as well as pinpointing areas for improvement. Areas which would receive particular focus over the next five years included food, travel, ICT, lab equipment and estates. Within each of these categories SRS and Procurement had identified ways of improving the sustainability of what the University was buying. The Group discussed where the shared workload sat between SRS and Procurement, with SRS in a supporting role, carrying out research, advising on SRS aspects of tenders, and providing communications.

SSAG congratulated Alexis Heeren on her recent appointment as SRS in Supply Chains Programme Manager.

Action – AH to add a sixth pathway around the University's investment activity.

Action – AH to share the Estates category report with DD.

12 Students' Association VP Community Manifesto

K

SSAG noted the manifesto, highlighting the objective on encouraging and promoting green living, particularly activities around textbook exchange, food recycling, and food sharing. It was confirmed that the Food Sharing pilot was going to be renewed and would be used by ACE as a basis for deciding a future approach for the University. Members noted that the Students' Association shop now had a zero waste section. The VP Activities and Services planned to do more promotion around the Farmers Market, including carrying out a trial at KB. SSAG welcomed the wide range of objectives and looked forward to working with the VP Community.

Action – RW to follow up with the Transport Manager on provision of bike pumps.



Sustainability Strategy Advisory Group

8th October 2019

Proposal for a Circular Economy Innovation Centre

Description of paper

1. The purpose of this paper is provide an overview of the proposed Circular Economy Innovation Centre or 'Centre' hereafter.

Action requested

2. The SSAG is asked to note that the business case for the Centre is under development and to comment on the outline proposition summarised below.

Recommendation

3. N/a

Background and context

4. The initiative is being brought to the attention of the Group because of its potential contribution to the University's: (1) Strategic Plan, to deliver positive impact for society in the Edinburgh City Region and beyond; (2) SRS Plan, to embrace the circular economy across research, teaching, operations and innovation as the University works to become a zero carbon, circular institution, and; (3) Waste Strategy. It also represents a significant first step in support of the University's emerging ambition regarding the Planetary Sustainability initiative, as well as being relevant to its response to the climate emergency.

Discussion

5. The circular economy

A circular economy is a regenerative system in which all resources are valued and nothing is wasted. It requires a systemic shift away from the traditional 'take, make, dispose' model of production and consumption, to eliminate waste and keep resources in use for as long as possible, to deliver a resilient, sustainable economy that meets society's needs now and in the long term. There are significant economic opportunities associated with this shift - for more information see for example: <https://www.ellenmacarthurfoundation.org/circular-economy/concept>

6. Strategic opportunity

With a thriving knowledge economy, a strong history of innovation and entrepreneurship, and an imperative to deliver inclusive economic growth through the City Region Deal, the Edinburgh region is ideally placed to be at the heart of the transition to a circular economy and associated opportunities for research and innovation.

The University of Edinburgh (SRS and EI) and Zero Waste Scotland (ZWS) have identified a strategic opportunity to accelerate this transition in the region and beyond by establishing a Centre that brings students, academics, business

representatives, and policy makers together to exchange knowledge, develop skills, co-create ideas and test innovative solutions.

7. Timing of action

Initial research demonstrates a clear and immediate need for the Centre. It would be prudent to respond to this opportunity before another institution fills the void (noting that similar ideas are being considered elsewhere in Scotland), particularly given ZWS's apparent keenness to support it.

8. Progress to-date

The University is developing the business case for the Centre in the year 2019/20. The proposed vision, mission and objectives for the Centre are presented in Figure 1, overleaf.

The Centre's objectives would be fulfilled by delivering a suite of activities across five areas:

- **High profile showcasing and problem-solving events**
- **Executive education and links to the prospective MSc in Circular Economy**
- **Research and innovation support**
- **Network building across key business sectors**
- **Policy engagement and advice provision**

It is intended that stakeholders across all spheres of the economy would be engaged in these activities, with a focus on those representing key business sectors in the region (i.e. festivals and tourism, creative industries, finance, construction, facilities management, food and drink, etc.).

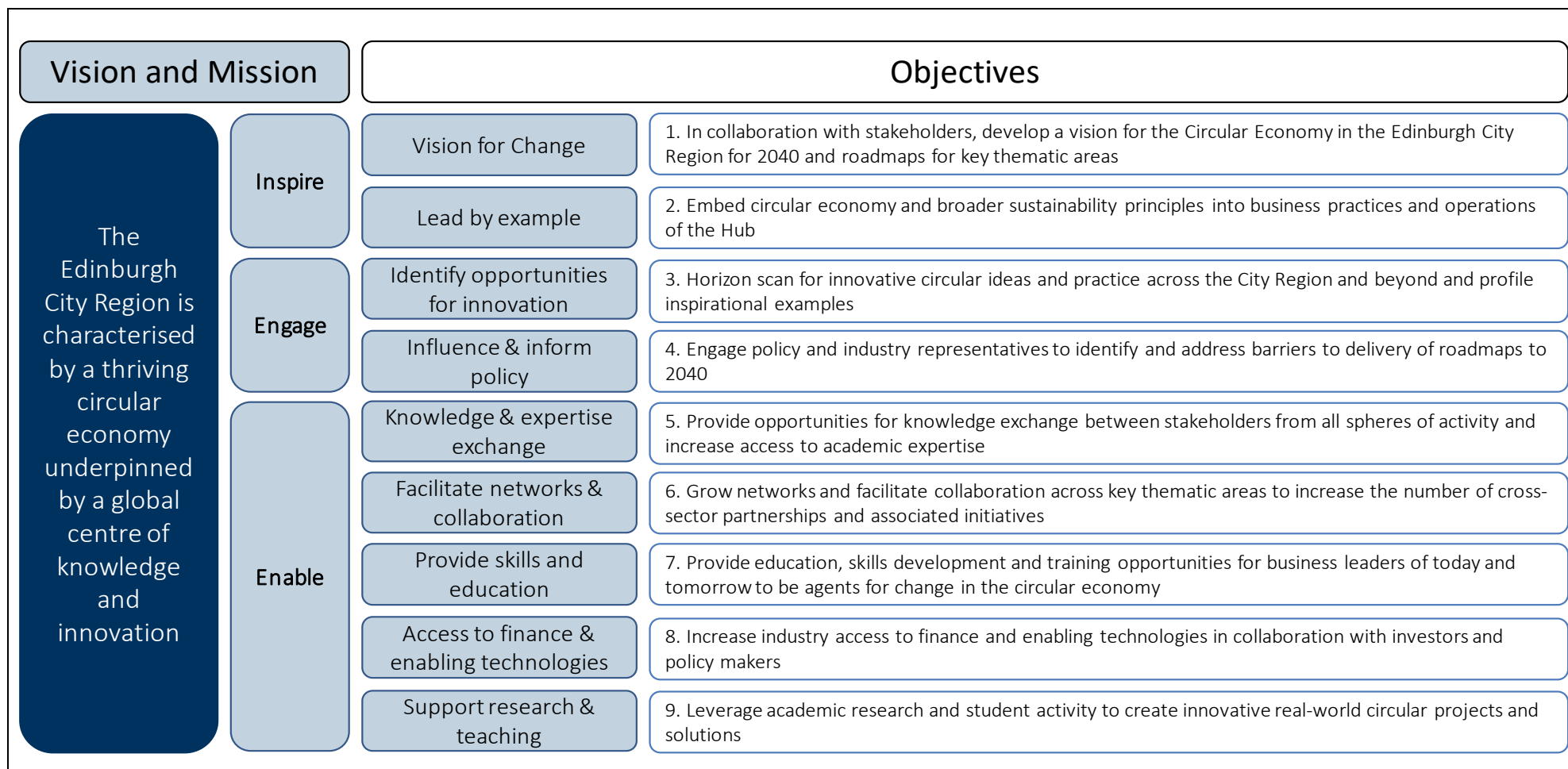
There would be a strong emphasis at the Centre on using the university campus as a living lab for research and innovation activities, in line with the University's whole institution approach to social responsibility and sustainability and support its role in delivering a circular economy in the Edinburgh City Region.

The Centre would have a physical and online presence and the working assumption is that it would be housed in an existing centre such as the Edinburgh Futures Institute.

There is great synergy between the Centre and the DDI Programme. Data-driven innovation will be a key enabler in the transition to a circular economy (e.g. by improving understanding of how resources flow in and around the city region and in identifying opportunities to eliminate waste from the regional economy), while data-driven circular economy research and innovation at the Centre will create new commercial opportunities across key business sectors in the region. These opportunities are currently being explored with the DDI core team and sector leads.

The Centre would also make a significant contribution to the development of the emerging Planetary Sustainability initiative and so any developments in this regard will be fully reflected in the business case.

Figure 1 – Hub Vision, Mission and Objectives



9. Financials

The current planning assumption is to aim to establish the Centre in the summer 2020, with the aid of ZWS and other partner/funder contributions, based on a business plan that demonstrates a breakeven by the end of Year 5 from a range of revenues. We anticipate that ZWS will provide a proportion of required seed funding and we intend to present a request to them in autumn 2019 to this end. Other sources to be investigated include the Scottish Funding Council, UKRI, philanthropic donors and private sector partners.

No application to the University for its funding of the Centre is anticipated at this time. In the meantime, existing resources are being prioritised to progress the opportunity.

10. Strategic benefits

Key strategic benefits of the proposed Hub are as follows:

- Generation of new opportunities for research and innovation;
- Enhancement of student experience with links to learning and teaching;
- Increased opportunities for circular economy practice in operations;
- Increased opportunities to support staff and student social enterprise;
- Contribution to DDI objectives;
- Contribution to inclusive growth in the Edinburgh City Region;
- Opportunity to develop an exemplar regional circular economy for Scotland;
- Contribution to 'Zero by 2040' plan, the Waste Strategy and the University's response to the climate emergency.

11. Resource implications

N/a. Business case development is being met from within existing budgets.

12. Next steps

Continue to refine the concept with stakeholders; prepare a business case and pitch for ZWS; identify potential organisational/physical locations; consider the relationship to the Planetary Sustainability Centre and other key initiatives; further clarify intersections with the City Deal/DDI.

13. Consultation

Internal: Edinburgh Innovations including COO; Edinburgh Futures Institute including Director; DDI team including Innovation Director and Sector Leads; Vice-Principal International; D&A Director of Philanthropy; academics in Engineering, Chemistry, Biology, GeoSciences, ECA, SSPS, Economics, Business School, GAAFS. Director of ECCL, Head of School of Geosciences (other Heads of Schools to be consulted).

External: ZWS; SEPA; Chamber of Commerce; City of Edinburgh Council; Scottish Government; Scottish Futures Trust; selected private sector and third sector organisations such as Robertsons Construction and BIFM Scotland.

14. Further information

Charlotte Lee-Woolf, SRS Business Development Executive



Sustainability Strategy Advisory Group (SSAG)

8 October 2019

The Government's Programme for Scotland 2019-20

Description of paper

This paper provides a briefing on the Programme for Scotland 2019-20 released by the Scottish Government on 3 September, setting out actions for the coming year.

Action requested

SSAG are asked to note and discuss the paper.

Background and discussion

The Scottish Government has just released (3 September 2019) its programme for government 2019-20. The programme is framed by wellbeing, the climate emergency and Brexit.

Key headline plans of relevance include:

- a 'Green New Deal', harnessing the power of the Scottish National Investment Bank, a £3 billion Green Investment Portfolio and a Green Growth Accelerator – what the Climate Change Emergency Response Group (CERG) has termed a 'Green City Deal' – to attract green finance to Scotland
- investing over £500 million in improved bus priority infrastructure to tackle the impacts of congestion on bus services and raise bus usage
- decarbonising Scotland's railways by 2035 and making the Highlands and Islands the world's first net zero aviation region by 2040
- developing regulations so that new homes from 2024 must use renewable or low carbon heat
- targeting a minimum of £30 million of support for renewable heat projects

The following briefing will focus on areas relevant to climate change, biodiversity and public bodies such as universities; it will include a list of new bills for introduction on 2019-20 and those already announced, response to the Climate Emergency Response Group (CERG) asks, and more detailed engagement with Chapter 1 on climate change and briefly on some content in Chapter 2 on green economy. Chapters 1 and 2 overlap significantly in some areas (repetitive), so this briefing will focus primarily on Chapter 1.

New and already announced bills

The programme notes bills for introduction in 2019-20 that have relevance to climate change and biodiversity:

- Animal Health and Welfare (amendment) – changes to maximum penalties for various wildlife offences.

- Continuity Bill – to allow alignment with EU law in devolved matters post Brexit.
- Good Food Nation Bill – Scottish producers ensure that what they produce is increasingly healthy and **environmentally** sound.
- Circular Economy Bill – encourage reuse of products and reduction of waste
- Heat Networks Bill – regulation of the heat network sector to support development of district and communal heat infrastructure.

Bills already announced include:

- Climate Change (Emissions Reduction Targets) Bill
- Transport Bill

Response to the CERG

Climate Emergency Response Group asks	Scottish Government's Programme for Government 2019-20 commitments
Mobilise the £11 billion of annual public procurement to support the product and service innovation the climate emergency response needs	We will mobilise the £11 billion of annual public procurement to support our climate emergency response, including consulting on legislation to require public bodies to set out how they will meet our climate change and circular economy obligations
Produce public guidance on sustainable, climate-friendly, healthy diets	We will work with business, the public and the third sector to develop guidance so more people are encouraged to eat more locally-produced, sustainable and healthy food that supports our aims on climate change
A £100 million Agricultural Modernisation Fund	We will create a new Agricultural Transformation Programme focused on sustainability, simplicity, profitability, innovation, inclusion and productivity. We will consider any additional funding implications in the Budget
Make regional land use plans for maximising the potential of every part of Scotland's land to contribute to the fight against climate change	We will make regional land use plans for maximising the potential of every part of Scotland's land to contribute to the fight against climate change
Initiate four new Green City Region Deals	We will unlock additional resource for emissions-reducing investment through a Green Growth Accelerator – referred to by the CERG as a 'Green City Deal' – combining public and private investment to transform cities and regions
Signal that every one of Scotland's city centres will be vehicle emission-free by 2030	We will consult on Scotland's ambition to make the transformative shift to zero or ultra-low emission city centres by 2030 by engaging extensively with key sectors, in particular with the bus sector

In the case of the first six asks, we can see that the procurement challenge appears to be fully taken up as well as public guidance on diets. The £100M for an agricultural modernisation fund has not been committed to with only consideration of any additional funding implications, but there is commitment to creating an Agricultural Transformation Programme. The land use plan ask is taken up, while the ask of specifically four new Green City Region Deals is not. A consultation approach is taken to the ask of vehicle emission free zones in every Scottish city.

Climate Emergency Response Group asks	Scottish Government's Programme for Government 2019-20 commitments
Establish a public-interest company to operate CCS (Carbon Capture and Storage) infrastructure	We will explore with partners their proposals on Carbon Capture, Usage and Storage (CCUS) and this will inform our Scottish public sector response to the UK consultation on CCUS business models. We will also work with the Scottish National Investment Bank to explore how to support the full-scale commercial deployment of CCUS in Scotland. Alongside this, we will take forward a number of actions to support and promote CCUS – including support for the Acorn project at St Fergus and the emerging Scottish industry-led CCUS alliance
Enhance building standards to deliver zero-carbon homes and buildings	We will set new standards to reduce energy demand, and associated carbon emissions, within new buildings by 2021. In addition, we will require new homes consented from 2024 to use renewable or low carbon heat. For non-domestic buildings, our ambition is to phase in this approach from this date
Accelerate Scotland's energy retrofit scheme – to reach Energy Performance Certificate (EPC) Band C by 2030 and zero-carbon by 2045	We will publish an updated position in our Energy Efficiency Route Map in December 2019 to accelerate the improvements of Energy Performance Certificate (EPC) ratings in our homes
Create a Scottish Heat Pump Sector Deal	We will go wider than this with the Scottish Low Carbon Heat Funding Invitation targeting a minimum of £30 million of support for projects, including heat pumps, that demonstrate innovative and low carbon ways of heating buildings
Complete plans for how we generate the renewable electricity needed to reach net-zero	Our next Energy Statement will set out the extent to which renewable and low carbon energy generation will need to combine in order to meet net zero, and we will monitor progress on an annual basis
Dedicate the Scottish National Investment Bank to delivering on the Climate Emergency	The primary mission of the Scottish National Investment Bank will be to ensure transition to net zero

Scottish Government has committed to the CERG ask of creating a Scottish Heat Pump Sector deal of sorts. But in other areas, government may not be seen as going far enough based on the CERG asks.

Chapter 1: Ending Scotland's Contribution to Climate Change

Commitments first laid out in Chapter 1 of the Programme include:

- £3B Green Investment Portfolio for projects to support a climate emergency response
- Establishment of National Forum on Climate Change to involve all in decisions

Transport

- Invest over £500M to improve bus service
- Decarbonise flights by 2040
- Decarbonise passenger rail by 2035

Scottish Water

- Zero-carbon for electricity use by 2040

Electric vehicles

- £17M for zero interest loans to support ULEV purchase

Planning

- National Planning Framework to accelerate reduction in emissions

Public sector

- Net-zero carbon standards for all new public sector buildings
- Decarbonisation of government's public sector fleet by 2025

GI and biodiversity

- Commitment to plant 12,000 hectares for woodland and forest creation, with additional £5M investment
- Additional £2M for Biodiversity Challenge Fund for projects addressing climate change

Sections to follow provide more detail on the above items, although in different order. Key points in each section are extracted here.

Policy and Investment

Public finance

Low carbon is a key theme in the public finance Infrastructure Plan

Planning

Climate emergency opens up discussion of more radical planning policy, to be initiated in the 4th National Planning Framework, with a draft by summer 2020, which will include:

- Support for micro-renewable technologies
- A programme for digital transformation (digital mapping)

Procurement

There will be consultation on legislation to require public bodies to set out how to meet climate change and circular economy obligations in procurement strategies.

Green New Deal

Green finance

A new Scottish National Investment Bank will be established with a £130M budget in the first year, with the primary mission to transition to net zero through:

- Green growth accelerator (green city deals)
- Green Investment Portfolio of £3B over three years (renewables, waste, circular economy, property, expanding to housing, transport, hydrogen)
- Global Ethical Finance Initiative (GEFI), with major conference in 2019, and working with UNDP to drive investment in nature-based solutions

Transport

A forthcoming National Transport Strategy has climate action as priority.

- **Aviation** – decarbonisation of flights by 2040; trial of zero emissions planes in Highlands and Islands with first trial in 2021 and regional decarbonisation of airports
- **Rail** – decarbonisation by 2035; electrification schemes at East Kilbride, Barrhead; battery powered trains and hydrogen fuel cell train development, with detailed timeframes by Spring 2020
- **Buses** - £500M for infrastructure, with Bus Service Operations Grants to support UL and ZC buses; also investigation of new forms of financing
- **Public sector fleet** – phase out of petrol/diesel cars and need for new petrol/diesel light commercial vehicles by 2025. Phase out of need for all petrol/diesel vehicles by 2030; continuance of Switched On Fleets programme
- **EVs** - £17M to support ULEV demand and expanding to include used EVs; improve infrastructure in collaboration with electricity network companies; £7.5M joint demonstration project to trial new ways to deliver and invest in EV charging; further industry engagement; £20M to support LAs, homes and business investment
- **Active travel** – continued commitment with appointment of Active Travel Commissioner for Scotland
- **LEZs** – LEZs to be put in place in Edinburgh, Aberdeen and Dundee by 2020; LEZ support fund; extensive consultation especially with bus sector
- **Transport innovation** - £2M investment for ideas to become firm proposals; develop proposals for new centres of expertise; new supply chain accelerator programme for vehicle fleets; hydrogen accelerator programme

Buildings and heating

- **A Heat Decarbonisation Policy Statement** is to be published in summer 2020
- **The Route Map of Energy Efficiency Scotland** will be updated; from April 2020, private landlord rentals must meet energy efficiency standards for tenancies
- **Decarbonising heat in new buildings** – new building standards by 2021; for the construction sector, new homes from 2024 to use renewable and low carbon heating, also for non-domestic by 2024; working with LAs on public sector net zero carbon standards for more efficient heating
- **Decarbonising heat sources and reducing emissions** – Scottish Low Carbon Heat Fund Invitation launch with £30M to support renewable heat projects (capital projects, heat pumps); support through Heat Networks Bill
- **Local heat and energy efficiency** – Local Energy Policy Statement to be published in December 2019; third round of LA pilots of local heat and energy efficiency strategies
- **Fuel poverty** – target date of 2040 to tackle causes; publication of Fuel Poverty Strategy in 2020; public energy company established by 2021

Energy

- **Renewable electricity** – accelerate efforts to use 100% renewable electricity on public sector estate (LAs); update CCP
- **Hydrogen** – hydrogen assessment project to begin; publish action plan in 2020
- **Offshore wind** – Offshore Renewable Energy Decommissioning Policy Guidance to be published in December 2019; Sectoral Marine Plan for

Offshore Wind consultation in Autumn 2019, published in 2020; £2M to support the sector

- **Wave and tidal** – already funded up to £40M
- **Bioenergy** – draft bioenergy action plan, consultation later in 2019 and final version by May 2020
- **Reducing emissions from oil and gas** – support of the Net Zero Solutions Centre (Oil and Gas Technology Centre), to be the first net zero hydrocarbon basin (CCUS, hydrogen and renewable tech)
- **CCUS** – work with Scottish National Investment Bank on support for full-scale deployment

Delivering skills for net zero

- **Climate Emergency Skills Action Plan** – development and publication, to set out framework for skills investment (how governments will work with FHE, etc.)
- **Support of new climate solutions course** and qualifications for public and private sector leaders

Circular economy

- **Circular Economy Bill** – consultation on proposals for 2020
- **Deposit return scheme** – to be delivered by 2021
- **Tackling single use plastics** – bag charges and banning items (cutlery, plates, food and drink containers by 2021)
- **Recycling summit** – hosted in December 2019
- **Steering group establishment**
- **Food waste** – marketing, rural exemption review, review of separation requirements, redistribution of edible products by food retail sites

Land

An independent consultation on changing land use patterns will be conducted. Regional land use plans will be developed with partnerships by 2021. Regional partnerships will create frameworks by 2023 identifying their biggest climate impacts. Scottish Government will work with the Scottish Land Commission on ways to ensure strategies support climate change mitigation and adaptation. A nitrogen balance sheet will be developed.

- **Farming and food production** – a new Agriculture Transformation Programme will launch with funding decided in the future; focus on 2019 on pilot schemes for agriculture, more tree planting encouraged, etc.
- **Peatlands** – investing £14M to fund peatland restoration projects
- **Forestry** – in the coming year, planting of 12,000 hectares of new woodland; increasing current tree planting targets; planting new woodland to recognise foresters and commemorate 1919 Forestry Act
- **Biodiversity** - £2M for the Biodiversity Challenge Fund committed for 2019-20; consideration of IPBES assessment and response; continued support of Central Scotland Green Network; strategic approach to wildlife management that includes animal welfare, with a set of principles published in 2020 along with other strategies (Honey Bee Health)
- **Access to outdoors** – continue greening urban areas; new air quality strategy in 2020

- **Marine environment and species** – Seabird Conservation Strategy consultation and adoption in 2020; new site for deep sea marine reserve; four new MPAs; designation of two new historic sites and other strategy updates and developments; publishing of research results on marine carbon sequestration and establishment of virtual centre

A joint endeavour

- **Consultation later in 2019 to amend statutory duties** on public bodies to ensure they drive change
- **Bid for UNFCCC COP26** (Glasgow)

Adaptation

- **Climate Change Adaptation Programme** - 5 year programme to be published end of September 2019
- **Flooding** – investment of £42M for flood protection, flood warning and forecasting systems for resilience
- **Property owners** – 2 year action plan for flood resilience, repairs and protection
- **Wildfires strategy** – developed by Scottish Fire and Rescue Service

Chapter 2: A Successful, Fair and Green Economy

As mentioned, green economy sections of Chapter 2 for the most part overlapped with Chapter 1, being repetitive. But a few items are noted here:

- 2020 is named the **Year of Coasts and Waters** - £50K will be available for one-off community projects for themed events, co-designed with young people
- **Good Food Nation** – development of a Food and Drink Environmental Action Plan with stakeholders, and hosting of sustainability summit end of 2019; progress report on Good Food Nation later in 2019; Good Food Futures Programme to be expanded to work with business, the public and the third sector

Concluding comments

The programme for government document was repetitive, presenting the same details in Chapters 1 and 2 for instance; the structure could have been considered more carefully. Adaptation was not mentioned in integrated ways that might have been expected, for instance in terms of urban greening, or peatland and woodland restoration. While Scottish Government has addressed CERG asks, they may be seen to fall short in their responses of the dramatic and rapid change that is required in an emergency situation.

Further information

Author

Elizabeth Vander Meer
Research & Policy Manager (Climate Change and Biodiversity)
10 September 2019

Presenter

Dave Gorman
Director of SRS

Freedom of information

This is an open paper.



Sustainability Strategy Advisory Group (SSAG)

October 2019

Sustainability and Festivals

Description of paper

This paper provides an update on the Sustainability and Festivals Project and proposed plans for 2020.

Action requested

SSAG are asked to note and discuss the paper.

Background and discussion

Establishing the Sustainability and Festivals Project

The Edinburgh Festival Fringe is the largest arts festival in the world and brings over 100,000 visitors per day into Edinburgh for a city-wide experience. People come from across the globe for the performances, food, drink, and festivities, many of which are centred on University grounds.

As the largest landlord of the Festival Fringe, the University is in a significant position to collaborate with tenants to ensure sustainability is further embedded in policy and practice.

The Sustainability and Festivals Project was established at the start of this year, following a short term internship in 2018. The purpose of the project was to develop and deliver opportunities to support sustainability at Edinburgh's Festivals in University venues.

Operationally the project sits within the Department for Social Responsibility and Sustainability (SRS), this includes the SRS Project Coordinator: Sustainability and Festivals role, which is the primary role that implements the work streams of the project. A Steering Group supports and monitors the progress of the project. Membership includes: Communications and Marketing; Edinburgh Futures Institute; Estates; Edinburgh University Students' Association; Festivals Office and the SRS Department.

Since the start of 2019, efforts have been focused on the Edinburgh Festival Fringe, laying the groundwork for improving sustainability in future years. Achievements include:

- Integrated sustainability into the University's Standard Operating Procedure for tenants
- Developed a new Sustainability Protocol for the University
- Established a baseline for current tenants policies and practices on sustainability

- Published online hub for sustainability information in the Festival Fringe
- Launched physical presence within the festival through the 'Sustainability Hub'
- Coordinated and delivered multiple festival sustainability events
- Helped establish a festival sustainability network of key stakeholders including tenants for the Fringe
- Supervised internship on the use of single use plastics in the Festival Fringe in University venues.

Proposed Project Plan for 2020

As outlined above, important progress has been made to improve sustainability in the Edinburgh Festival Fringe in University venues through improvements to policy, practice and engagement. Key stakeholders involved in the project are keen to implement further opportunities to embed sustainability, capitalising on the momentum, goodwill and knowledge built up since the start of the year.

Funding has been secured to continue the SRS Project Coordinator: Sustainability and Projects role until the end of December 2019. This will enable the University to directly follow up with tenants to review this year's Festival Fringe and lay the ground work for next year. This resource has further enabled work to identify opportunities to introduce a reusable cup scheme by tenants at University venues next year.

Work is underway to secure funding for a one year extension for 2020. Once secure the intention is to submit a bid to the planning round for a more permanent solution to support the delivery of the Sustainability and Festivals Project for the longer term.

Four key areas have been identified for the proposed project for the coming year, each encompassing objectives with deliverables nested under each, directly contributing to strategic commitments on the climate crisis, waste and the curricular economy, community engagement and the student experience.

These are:

1. Work with companies, tenants and University stakeholders to implement changes to policy and practice to improve the sustainability of the 2020 Edinburgh Festival Fringe.
2. Support opportunities for student learning, academic research and community engagement in the Edinburgh Festivals.
3. Identify ways to improve sustainability via the University's wider involvement in Edinburgh's Festivals.
4. Develop the University's long term approach to sustainability and Edinburgh's Festivals with key stakeholders.

Resource implication

As highlighted, funding has been secured to continue the SRS Project Coordinator: Sustainability and Projects role until the end of December 2019. Work is underway through the Steering Group to secure funding for a one year extension for 2020.

Risk management

Sustainability is increasingly becoming an important issue in the Edinburgh Festivals, with greater media attention and public interest on the environmental and social impact on the city. This has been strengthened further by the high level of interest in the climate crisis, reflected by the high levels of involvement of staff and students in the climate strikes and University delivered events on the climate crisis.

Failure to extend the SRS Project Coordinator: Sustainability and Festivals role would directly lead to the project not being able to fulfil its potential and objectives. This role is critical to the delivery of the project as key stakeholders, including University departments involved, do not have the capacity to take this on.

Being at the forefront of efforts to improve the sustainability of the Festival Fringe, as the largest landlord, would have a positive impact on the reputation of the University, especially within the University's commitment to the climate crisis and the Sustainable Development Goals.

Equality and diversity

Equality and diversity has been actively considered and promoted by the Sustainability and Festival Project. As part of the Sustainability Hub, the University hosted Fringe of Colour, a project aiming to support performers and attendees of colour at the Fringe. The Hub also hosted Somewhere At The Fringe campaign, which supports LGBT+ Culture & Enterprise at the Edinburgh Fringe.

Next steps

To follow up with tenants to complete the review of this year's Festival Fringe, secure funding for next year and start to implement proposed plans for 2020.

Consultation

Input from the Sustainability and Festivals Steering Group.

Further information

Prepared by:

Kerry Cheek, SRS Project Coordinator: Sustainability and Festivals

Matthew Lawson, Student Engagement, Events and Reporting Programme Manager

Presented by:

Michelle Brown, Deputy Director and Head of SRS Programmes

Freedom of information

This is an open paper.



Sustainability Strategy Advisory Group (SSAG)

Description of paper

The paper provides an update on energy & utilities strategy priorities and activities at Q1 2019/20 for discussion within the Sustainability Strategy Advisory Group.

Action requested

This paper is for information; no advisory group decisions are required.

Recommendation

It is recommended the advisory group review and provide verbal comment.

Background and context

The paper sets out issues and priorities relevant to utilities infrastructure and performance. These activities support the University Strategic Plan, Estates Strategy, Sustainability Strategy and Climate Change Strategy.

Discussion

1) Utilities Metering Update

- a) Utility metering installations have progressed in 2018/19 to enable building level metering of electricity and heat across the majority of university sites.

CAMPUS	ELECT METER	HEAT METER	Priorities 2019/2020
Holyrood	20 of 22 meters installed; awaiting shut downs.	7 heat meters installed; 14 upgraded from pulse to Modbus	
Central		4 heat meters installed; 1 upgraded to Modbus	Review energy centre heat and cooling metering; upgrade pulse heat / cooling meters to Modbus; Appleton data centre metering
Kings Buildings	71 electrical meters installed	17 heat meters upgraded from pulse to Modbus; 3 additional meters added for Ashworth	Commissioning of new meters; additional heat meters at Fleeming Jenkin area; JCMB data centre metering.
Pollock Halls		7 heat meters installed	Remaining heat meters for district heating - awaiting pipework upgrade.

- b) Renewable energy metering and performance monitoring upgrades are progressing to enable e.g. solar PV generation information to be displayed alongside building energy performance information in buildings. A dashboard has been developed to display real time generation data.
- c) Data centre performance reporting is under development at ACF, JCMB and Appleton Tower. The ACF system will include high frequency data collection with power quality monitoring. A dashboard display will show real time performance indices alongside historical trends and time period comparators. It is now expected that these systems will be operational by the end of November (pending planned meter replacements).

2) Energy and Utilities Performance

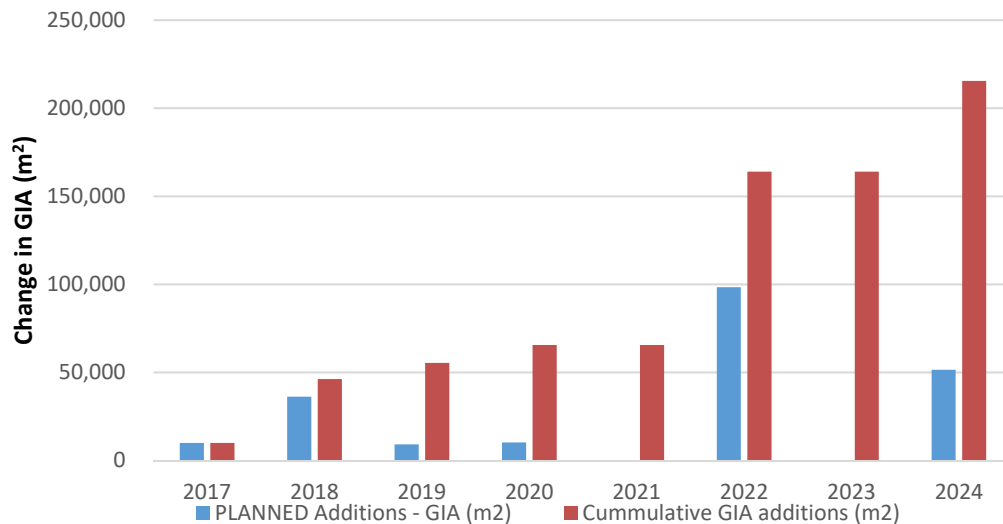
- a) A draft summary of 2018/19 utilities consumption, cost and associated GHG emissions is contained in Appendix 1 (subject to verification).
- b) Our M&T software partner, Optima Energy, have been commissioned to produce updated utility KPI management reports (kWh/m²) (£/m²) to allow quarterly performance reporting by e.g. Institution, Campus, College, School, Building, Building Type. A sample of pending KPI reporting categories is included in Appendix 1
- c) Utility target & exception report pilot will focus on 'top ten' energy users. Managed action plans with key stakeholders are a priority through 2019. Performance reports for: ACF, Appleton Tower, JCMB, Roslin, SCRUM and the School of Chemistry (Joseph Black) are in progress.

3) Utilities Finance

- a) A new Utilities Forecast Working Group (UFWG) has been established to monitor and record utilities finance and regulatory risks. Quarterly updates are provided on: budget position; 3 & 10 year budget forecasts; contract/supplier matters; procurement matters; unit rate forecasts; funding matters; campus development; energy projects; energy performance; regulatory compliance.
- b) The 2018/19 end of year utility expenditure was on target with a favourable variance of around 4% against budget (see Appendix 1).
- c) Wholesale energy costs increased throughout 2018. The Scottish Procurement hedging strategy (advanced volume purchase) reduced the impact of wholesale volatility on UoE gas and electricity rates.
- d) Costs for 2019/20 in comparison to 2018/19 were anticipated to increase 11-14%. Actual pricing from April 2019 combining with April 2020 price expectations has allowed this forecast to be reduced to an increase of 7.5 to 9% for 2019/20.
- e) EDF and TGP have been reappointed as electricity and gas suppliers to the Scottish public sector.
- f) The Water Services Contract is currently out to tender for a start date of March 2020.

4) Campus Development / Growth

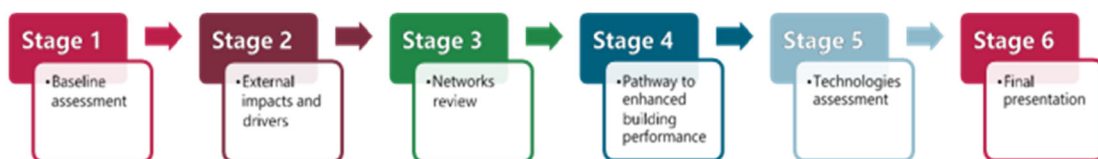
- a) Information received to date indicates a net increase in GIA (new build, acquisition, and divestment) of ~25,000m² p.a. to 2025 (average utility rates) with an increase in expenditure of £500k p.a. (+3% p.a. on the utility budget).



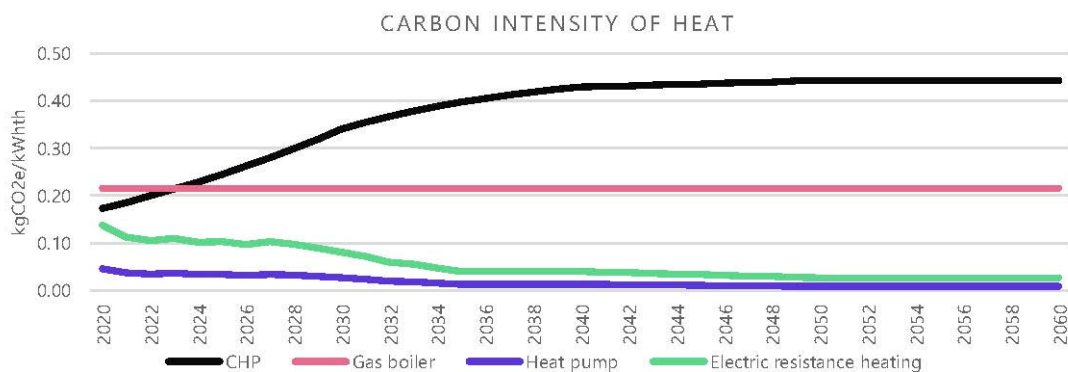
- b) Approximately 100,000m² of energy intensive GIA (biomedical research, BRF, laboratory, IT) will be added in 2022. Energy costs will exceed averaged values noted above; additional utility costs could exceed £1M p.a. (6%).
- c) Utility cost increases resulting from new developments (£500k p.a) exceeds anticipated savings derived from energy efficiency investments (~£390k p.a.) at the current rate of investment and delivery.

5) Energy Masterplan

- a) The purpose of the Energy Masterplan is to explore the techno-economic options which will deliver a cost effective energy strategy enabling 'smart' energy infrastructure, campus integrated teaching and research opportunities (around energy themes) and a clear 'zero carbon' heat and electricity pathway.
- b) The 'Energy Masterplan' scope has progressed in six stages: baseline energy performance; external impacts and drivers; heat and power network constraints and opportunities; building improvement pathways; and renewable technology integration pathways, as illustrated below.



- c) The final report, from Buro Happold, has been delayed to October 2019; key outcomes and a draft strategy will be summarised for the next SSAG.
- d) A requirement to limit the scope of study has focused the assessment on three campus areas: George Square, Kings Buildings and Pollock Halls.
- e) For two decades the university has derived operating efficiencies and lower GHG emissions by investing in heat networks, private wire networks and gas fired combined heat and power engines to generate and distribute electricity and heat. The challenge is that fossil fuel driven electricity generation will increasingly become 'higher carbon' relative to alternate options under a decarbonising electricity grid, illustrated below.



- f) A range of low carbon heat strategies have been reviewed including use of hydrogen and biogas, biomass, high and low temperature heat pumps and solar PV. Heat pump technology has emerged as a costly but least risk strategy.
- g) Operating an efficient heat pump led heat strategy requires our heat networks to transition to lower operating temperatures, requiring significant building level interventions.
- h) ‘Light’ and ‘Deep’ building refurbishment pathways have been scoped for a pilot group of buildings (Chancellors’ Court, James Clerk Maxwell Building, Swann Building, 7 George Square, Main Library, Baird / Ewing / Lee Buildings, Sanderson Building, Paterson’s Land, Charles Stewart House, Informatics/ Dugald Stewart, Roslin Institute, and SCRIM) evaluated for capital cost, energy demand reduction and GHG emissions mitigation.
- i) A light retrofit represents the minimum level of intervention to allow the building to operate on our district heating network. Light interventions focus on measures such as lighting upgrades, pipework insulation, pump and fan motor upgrades and controls interventions. Light interventions in ‘older’ buildings are estimated to achieve 10-30% reductions in electricity demand with only marginal improvements on heat demand.
- j) A deep retrofit represents the maximum level of intervention to not only minimise electrical and heating consumption but also to facilitate lower temperature heat network operation. Reducing the flow temperature of the heat network increases efficiency and effective utilisation of heat pumps. Deep interventions include disruptive refurbishments such as building fabric and glazing upgrades and upgrades to heating systems. Deep refurbishments in ‘older’ buildings are estimated to achieve a 40-60% reduction in heat demand.
- a) Intervention costs are building specific and range from £50/m² to 500/m². Building level recommendations will be circulated in due course.
- b) The cost/benefit of investing in deep refurbishment must be balanced against the cost of offsetting residual GHG emissions. Buro Happold indicate the cost of deep refurbishment is cost effective relative offsetting in most cases.
- c) Significant residual emission remain in 2040 and a strategy for their credible displacement is required. This may include: buying 100% renewable electricity from a certified supplier; increasing on-site generation of zero carbon electricity; investment in offsetting (reforestation and peatland restoration) or utilisation of “negative emissions” technologies (biomass gasification with CCS).
- d) The Kings Buildings campus is likely to be the focus of a more detailed pilot ‘low carbon’ energy masterplan.

2) Energy Efficiency Projects:

- a) An 'Energy Projects Report' (Appendix 2) summarises committed energy efficiency projects and records pending pipeline projects in progress.
- b) Utility cost savings enabled in 2019/20 are ~£0.5M. There is potential to accelerate this in the next year.
- c) Pipeline projects exceeding £20.0M are in development enabling annual savings of £2.3M and 7,000 TCO_{2e}. The capital funding required to progress these projects exceeds the availability of funds within the Sustainable Campus Fund (SCF) to 2020/2021.
- d) External grant and low interest loan funds are being pursued.
- e) Pipeline 'energy efficiency' projects prioritized within the energy strategy include:
 - o Deep Energy Efficiency' retrofit in the school of Chemistry (£5M+). Funding sought. Recommend pursuing low interest SFC loan.
 - o Easterbush HV/DH upgrade (£5.7M). SPB 6.7 years. Tender strategy in progress. Funding agreed.
 - o LED lighting upgrade; Phase 2 (£1M+). Tendered. SPB 8.3 Years. Funding sought (SCF).
 - o Easterbush freezer farm (£1.0M). In development. Funding sought (SCF).
 - o Energy efficiency upgrade at Appleton Tower data centre (£1M+).
 - o Energy efficiency upgrade at JCMB data centre (£1M+).

3) SFC University Carbon Reduction Fund (UCRF) 2018/19

- a) Loan: £5,191,910. Deductions: £61,808.45 x 84 months (August 2019 to July 2026)
- b) SFC UCRF Performance is included in the 'Energy Projects Report' and includes commitment, spend and performance metrics.
- c) Commitments: Savings £652k p.a. and 2,620 TCO_{2e} p.a. SBP 7.9 yrs.
- d) Current Performance: Savings £623k p.a. and 2,128 TCO_{2e} p.a. SBP 8.6 yrs.
- e) The primary risks are a) solar farm tender cost b) lighting project costs as works progress.

4) SFC University Carbon Reduction Fund (UCRF) 2019/20 – 2020/21

Expressions of interest have been sought from the SFC to access their £59M Financial Transaction programme in 2019/20 and 2020/21. Backlog maintenance and space quality improvements are priorities alongside GHG mitigation. Shortlisted UoE projects appropriate for the SFC fund include

Project	Budget	Status
LED lighting upgrade. Phase 2.	£1M+	Shovel Ready
'Deep energy efficiency' retrofit in the School of Chemistry; 50% reduction in energy demand.	£5M+	Technical proposal and cost plan in progress
Pathway to PUE <1.2 at Appleton Tower data centre	£1M+	In development.
Pathway to PUE <1.2 at JCMB data centre	£1M+	In development
Pollock Halls Energy Centre / Network Upgrade	£6M+	Feasibility in progress
Secondary heating system / DHN optimization	£2M+	In development

- a) The university declined to participate in the SFC Financial Transaction EOI submission. However, the SFC have expressed interest in the 'Deep energy efficiency' retrofit in the School of Chemistry.

A developed design has been instructed to enable a draft application to progress in October 2019 should internal approvals be obtained.

5) Sustainable Campus Fund

- a) Budget: £4,750,000.
- b) Commitment: contribution to 10% reduction in energy cost; reduction in GHG emissions.
- c) UoE SCF fund Performance is included in the 'Energy Projects Report' and includes commitment, spend and performance metrics.
- d) Current Performance: Savings £369k p.a. and 1,021TCO₂e p.a. SBP 5.0 yrs.

Resource implications

Energy and utilities strategy actions are being delivered through agreed budgets. The realisation of additional operating benefits will be driven by capital funding availability.

Risk Management

Institutional risks and mitigating actions are contained in the Energy Strategy Risk Register, reported via the Utilities Forecast Working Group (UFWG). Risks are broadly focused around the following themes:

1. University Strategic Targets – failure to achieve net zero GHG emissions by 2040.
2. Operating Cost – escalating annual energy costs, escalating GHG emissions cost.
3. Environmental Impact - Increasing GHG emissions; reliance on fossil fuels.
4. Regulatory Reporting – failure to manage and report energy and emissions input/output.

Delivery risks include:

1. Internal capital funding – energy efficiency investments are funded largely through capital contributions to the Sustainable Campus Fund. Project performance is evaluated in terms of £/TCO₂e, NPV, ROI and simple payback. The capital cost of prioritized projects exceeds the available funding.

Maintaining the existing level of annual operating cost reductions and GHG mitigation will require additional access to capital funding from 2019/20.

Accelerating the realisation of identified operating cost benefits will require a step change in funding allocation and project delivery.

2. Access to external funding – enabling a step change in building/network energy performance, and enabling the integration of low carbon heat technologies, requires significant capital funding support. Low interest loans are likely to continue to be made available through Scottish Government programmes, but at a pace, schedule and scale out with university control.

Equality & Diversity

Equality and diversity requirements are monitored within Energy and Utilities Strategy; an Equality Impact Assessment is not deemed necessary at this stage.

Next steps

The Head of Energy & Utilities will take forward actions proposed by the SSAG and collaborate as required with relevant stakeholders. Actions are recorded in the Energy Strategy Action Plan.

Consultation

The content of this paper has been reviewed by the Director of Estates Operations. Information related to the Sustainable Campus Fund performance has been reviewed by the Utilities Working Group. Information related to the Utilities Finance Working Group has been reviewed by the Heads of Estates Operations and Estates Finance.

Further information

Information requests should be directed to Dean Drobot, Head of Energy & Utilities.

Author & Presenter

Dean Drobot
Head of Energy & Utilities, Estates Department
02 October 2019

Freedom of Information

This is an open paper.

Appendix 1

1.a Summary of Utility Variations

Consumptions	EC Gas	Non EC Gas	Total Gas	Heat	EC Electricity	Grid Electricity	Electricity	Gas Oil	LPG	Total
Year	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh
14/15	146543	56130	202673	69019	39951	86549	126499	0	154	251802
15/16	138414	50374	188788	62529	41207	88614	129821	890	151	243778
16/17	131549	42891	174440	65643	31303	99996	131299	148	138	240132
17/18	141696	51350	193046	71907	30740	100734	131474	150	150	262166
18/19	157046	47736	204781	68437	35977	88650	124626	150	150	253169
%Change 14/15 to 15/16	-5.5%	-10.3%	-6.9%	-9.4%	3.1%	2.4%	2.6%		-1.9%	-3.2%
%Change 15/16 to 16/17	-5.0%	-14.9%	-7.6%	5.0%	-24.0%	12.8%	1.1%		-8.7%	-1.5%
%Change 16/17 to 17/18	7.7%	19.7%	10.7%	9.5%	-1.8%	0.7%	0.1%	1.5%	8.7%	9.2%
%Change 17/18 to 18/19	10.8%	-7.0%	6.1%	-4.8%	17.0%	-12.0%	-5.2%	0.0%	0.0%	-3.4%
%Change 14/15 to 17/18	-3.31%	-8.52%	-4.75%	4.18%	-23.06%	16.39%	3.93%		-2.59%	4.12%
Change 14/15 to 17/18	-4847	-4780	-9626	2888	-9211	14185	4974		-4	10364
Emissions	EC Gas	Non EC Gas	Total Gas	Heat	EC Electricity	Grid Electricity	Electricity	Gas Oil	LPG	Total
tonnes CO2	tCO2	tCO2	tCO2	tCO2	tCO2	tCO2	tCO2	tCO2	tCO2	tCO2
14/15	27107	10382	37489	2895	0	42777	42777	0	33	83194
15/16	25468	9269	34737	1560	0	36513	36513	246	32	73089
16/17	24226	7899	32125	2554	0	38441	38441	41	30	73191
17/18	26066	9446	35513	1312	0	30945	30945	40	32	67843
18/19	28873	8776	37649	1297	0	23889	23889	39	32	62906
%Change 14/15 to 15/16	-6.0%	-10.7%	-7.3%	-46.1%		-14.6%	-14.6%		-1.9%	-12.1%
%Change 15/16 to 16/17	-4.9%	-14.8%	-7.5%	63.7%		5.3%	5.3%		-8.7%	0.1%
%Change 16/17 to 17/18	7.6%	19.6%	10.5%	-48.6%		-19.5%	-19.5%	-1.4%	8.7%	-7.3%
%Change 17/18 to 18/19	10.8%	-7.1%	6.0%	-1.1%		-22.8%	-22.8%	-4.3%	0.0%	-7.3%
Cost	EC Gas	Non EC Gas	Total Gas	Heat	EC Electricity	Grid Electricity	Electricity	Gas Oil	LPG	Total
£	£	£	£	£	£	£	£	£	£	£
14/15	£3,498,650	£1,620,764	£5,119,414	£2,286,686	£3,861,097	£7,339,010	£11,723,274	£0	£21,000	£15,651,723
15/16	£3,466,967	£1,370,306	£4,837,273	£2,239,977	£4,439,007	£8,685,720	£13,124,728	£12,000	£20,000	£16,756,011
16/17	£2,062,413	£1,146,385	£3,208,798	£2,279,951	£3,286,086	£9,753,360	£13,039,447	£12,000	£20,000	£16,486,783
17/18	£2,532,609	£1,134,541	£3,667,149	£2,679,242	£2,829,231	£10,358,096	£13,187,328	£13,000	£24,000	£17,169,754
18/19	£3,169,741	£1,159,721	£4,329,462	£2,144,148	£4,010,529	£9,905,438	£13,915,967	£13,000	£24,000	£17,505,373
%Change 14/15 to 15/16	-0.9%	-15.5%	-5.5%	-2.0%	15.0%	18.4%	12.0%		-4.8%	7.1%
%Change 15/16 to 16/17	-40.5%	-16.3%	-33.7%	1.8%	-26.0%	12.3%	-0.6%		0.0%	-1.6%
%Change 16/17 to 17/18	22.8%	-1.0%	14.3%	17.5%	-13.9%	6.2%	1.1%		20.0%	4.1%
%Change 17/18 to 18/19	25.2%	2.2%	18.1%	-20.0%	41.8%	-4.4%	5.5%		0.0%	2.0%
%Change 14/15 to 17/18	-27.61%	-30.00%	-28.37%	17.17%	-26.72%	41.14%	12.49%		14.29%	9.70%
Change 14/15 to 17/18	£-966,042	£-486,223	£-1,452,265	£392,556	£-1,031,866	£3,019,087	£1,464,054		£3,000	£1,518,031
Cost per Unit	EC Gas	Non EC Gas	Total Gas	Heat	EC Electricity	Grid Electricity	Electricity	Gas Oil	LPG	Total
£/kWh	£/kWh	£/kWh	£/kWh	£/kWh	£/kWh	£/kWh	£/kWh	£/kWh	£/kWh	£/kWh
14/15	£0.0239	£0.0289	£0.0253	£0.0331	£0.0966	£0.0848	£0.0927	£0.0000	£0.1364	£0.0622
15/16	£0.0250	£0.0272	£0.0256	£0.0358	£0.1077	£0.0980	£0.1011	£0.0135	£0.1324	£0.0687
16/17	£0.0157	£0.0267	£0.0184	£0.0347	£0.1050	£0.0975	£0.0993	£0.0812	£0.1450	£0.0687
17/18	£0.0179	£0.0221	£0.0190	£0.0373	£0.0920	£0.1028	£0.1003	£0.0867	£0.1600	£0.0655
18/19	£0.0202	£0.0243	£0.0211	£0.0313	£0.1115	£0.1117	£0.1117	£0.0867	£0.1600	£0.0691
%Change 14/15 to 15/16	4.9%	-5.8%	1.4%	8.1%	11.5%	15.6%	9.1%		-2.9%	10.6%
%Change 15/16 to 16/17	-37.4%	-1.7%	-28.2%	-3.0%	-2.6%	-0.5%	-1.8%		9.5%	-0.1%
%Change 16/17 to 17/18	14.0%	-17.3%	3.3%	7.3%	-12.3%	5.4%	1.0%		10.4%	-4.6%
%Change 17/18 to 18/19	12.9%	10.0%	11.3%	-15.9%	21.1%	8.7%	11.3%		0.0%	5.6%
%Change 14/15 to 17/18	-25.14%	-23.48%	-24.80%	12.46%	-4.77%	21.26%	8.23%		17.32%	5.36%
Change 14/15 to 17/18	£-0.0060	£-0.0068	£-0.0063	£0.0041	£-0.0046	£0.0180	£0.0076		£0.0236	£0.0033

1.b1 KPI Selection Page - Geographical

Energy Centres

 Easter Bush
 George Square
 Holyrood
 Kings Buildings
 Pollock

KPI Utility Name

 Electricity
 Natural Gas
 Heat Meter
 Chilled Water

KPI BRF Selection

 null
 BRF FACILITY (HIGH COST)
 BRF FACILITY (LOW COST)

KPI Lab Building Selection

 null
 Lab

Scroll down for KPI reports built on selected filters and date range

KPI Building Topology

 null
 Corporate Offices
 Data centre
 Education Building
 Education/Research Building
 Energy Centre
 Farm Building
 Health/Medical Centre
 Nursery
 PRIVATE LET
 Project/Refurb
 Public Access Building
 Residential Accommodation
 Sports Centre
 Substation
 Theatre

KPI Benchmark Topology

 null
 Education (further and higher) - lectur...
 Education - lecture room, arts, typical
 Education - lecture room, science typical
 General Accommodation
 General Office
 Public Buildings
 Schools and Seasonal Public Buildings
 University Campus

KPI Site Group

 null
 ACF
 ECA
 Firbush
 Kennedy
 Little France
 NewCol
 Peffermill
 Pollock
 Quart
 WGH

Date

start date: 01/06/2019 end date: 31/07/2020

KPI Campus

 null
 BioQuarter
 Central
 Easter Bush
 Kings Buildings
 Western General

1.b2 KPI Selection Page – Schools and Colleges

College

 AHSS CSG ISG MVM NSU SCE USG

Energy Centres

 Easter Bush
 George Square
 Holyrood
 Kings Buildings
 Pollock

KPI Utility Name

 Electricity
 Natural Gas
 Heat Meter
 Chilled Water

KPI BRF Selection

 null
 BRF FACILITY (HIGH COST)
 BRF FACILITY (LOW COST)

KPI Lab Building Selection

 null
 Lab

Scroll down for KPI report built on selected filters and date range

Date

start date: 01/06/2019 end date: 31/07/2020

KPI Building Topology

 null
 Corporate Offices
 Data centre
 Education Building
 Education/Research Bui...
 Energy Centre
 Farm Building
 Health/Medical Centre
 Nursery
 PRIVATE LET
 Project/Refurb
 Public Access Building
 Residential Accommoda...
 Sports Centre
 Substation
 Theatre

KPI Benchmark Topology

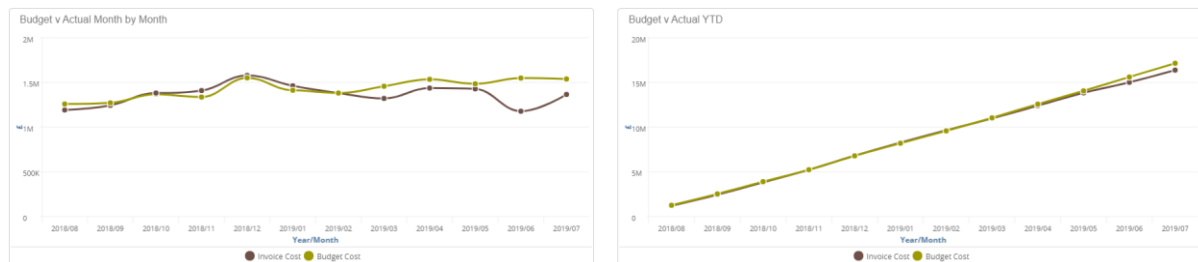
 null
 Education (further and higher) - lectur...
 Education - lecture room, arts, typical
 Education - lecture room, science typical
 General Accommodation
 General Office
 Public Buildings
 Schools and Seasonal Public Buildings
 University Campus

KPI Site Group

 null
 ACF
 ECA
 Firbush
 Kennedy
 Little France
 NewCol
 Peffermill
 Pollock
 Quart
 WGH

[Back](#)

2.b Budget vs Actual Variance Graphs



University of Edinburgh Sustainable Campus Fund

Project Type	Count of Project Type	Total CAPEX	SCF Award	Average of Simple Payback	Savings Cost [£/annum]	Savings GHG [TCO2/ annum]	Savings GHG [LT TCO2]	£ / TCO2e LT
Heating	1	£135,000	£60,200	17.1	£7,900	26.9	767	£176
Cooling	3	£181,400	£155,666	11.0	£25,700	62.2	889	£676
LED lighting	37	£895,702	£851,033	7.9	£126,819	450.2	11,240	£3,349
Boilers	4	£118,384	£118,384	7.7	£16,035	85.0	921	£535
Renewable energy	2	£274,200	£274,200	7.1	£54,600	84.7	1,432	£355
Lab Equipment	15	£98,696	£181,011	6.6	£35,619	99.0	877	£5,920
Lighting controls	3	£15,100	£15,100	4.9	£3,730	14.2	126	£505
Insulation - pipework	1	£102,000	£102,000	2.8	£37,000	179.0	4,028	£25
Computers & IT solutions	1	£22,686	£22,686	0.4	£56,000	0.0	0	£0
Ventilation	1	£1,530	£1,530	0.3	£5,360	19.7	591	£3
Lab Ventilation	1		£138,635					
Total	69	£1,844,698	£1,920,445		£368,763	1,020.8		£11,545

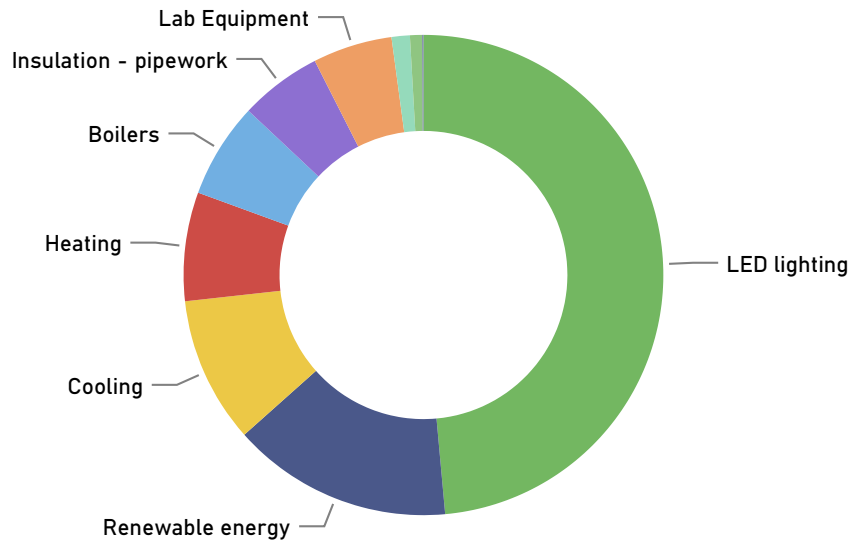
MAC (£/TCO2e LT)
£88

Simple Payback
5.0

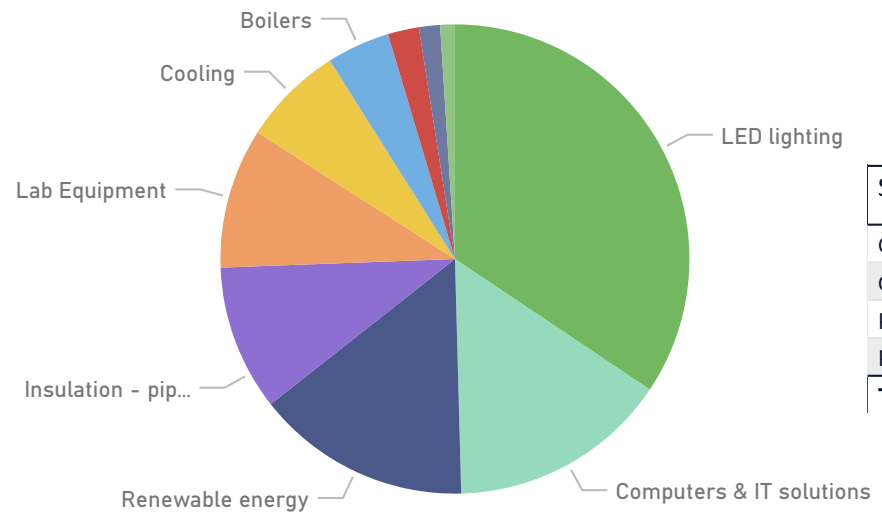
Funding Source
 SCF

Status
 Select all
 Complete
 Onsite
 Part Complete
 Pre-Contract

Total CAPEX by Project Type



Savings Cost [£/annum] by Project Type



Status	Count of Status	Total CAPEX	SCF Award
Onsite	20	£741,393	£9
Complete	34	£763,072	£6
Pre-Contract	13	£289,074	£2
Part Complete	2	£51,159	£
Total	69	£1,844,698	£1,9

Scottish Funding Council Universities Carbon Reduction Fund 2018/19

Project Type	Count of Project Type	Total CAPEX	SFC award	Average of Simple Payback	Savings Cost [£/annum]	Savings GHG [TCO2/ annum]	Savings GHG [LT TCO2]	£ / TCO2e LT
Renewable energy	2	£3,226,328	£3,226,328	7.9	£316,673	1,080.2	24,305	£207
LED lighting	15	£1,204,672	£1,204,672	9.7	£125,487	438.0	10,951	£1,564
Transformers	1	£376,884	£376,884	4.5	£83,035	283.2	8,497	£44
Lab Ventilation	1	£277,610	£138,975	8.4	£33,000	130.0	1,334	£208
Lab Equipment	5	£129,127	£104,627	4.1	£31,602	41.3	498	£5,202
		£64,800	£64,800	0.0	£0	0.0	0	£0
Computers & IT solutions	1	£49,658	£49,658	4.0	£12,341	42.1	758	£66
Ventilation	1	£14,040	£14,040	0.8	£17,940	104.0	1,067	£13
Motor controls	1	£8,976	£8,976	6.6	£1,364	4.7	48	£188
Lighting controls	1	£3,300	£2,950	2.4	£1,392	4.8	42	£78
Total	28	£5,355,395	£5,191,910		£622,835	2,128.3	47,499	

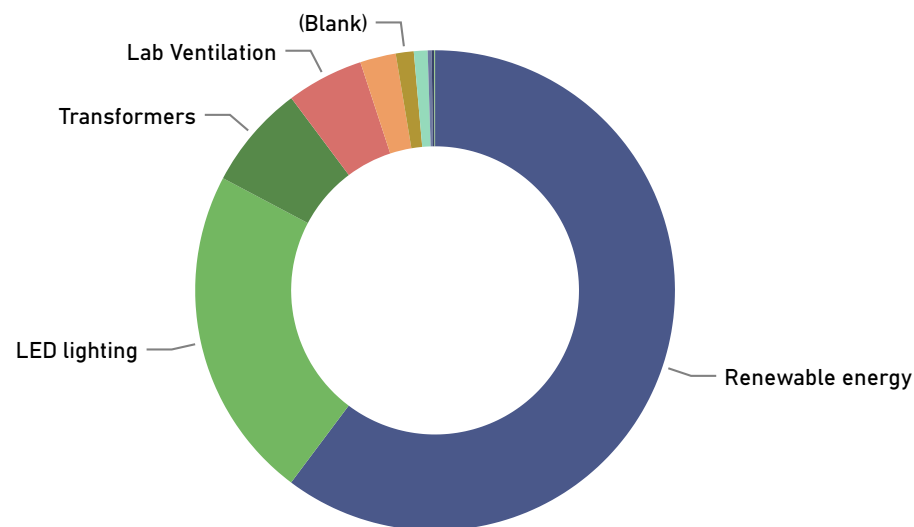
MAC (£/TCO2e LT)
£113

Simple Payback
8.6

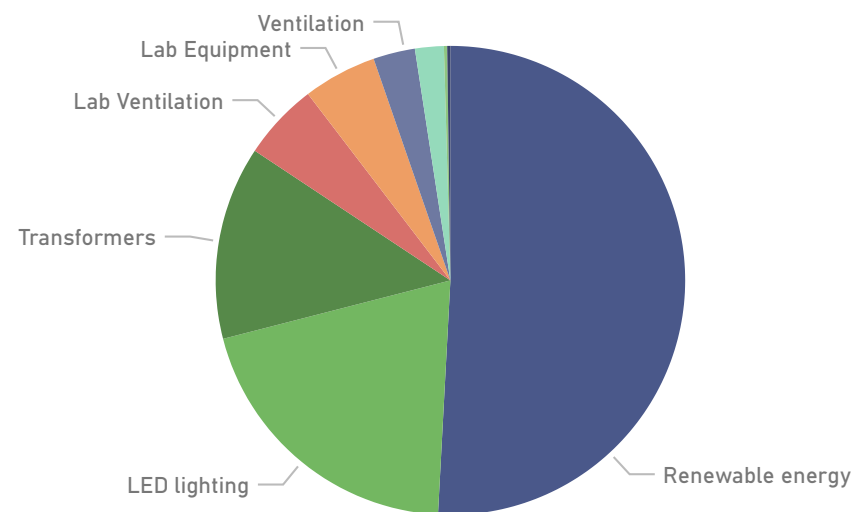
Funding Source SFC UCRF

Status Select all
 Complete
 Onsite
 Part Complete
 Pre-Contract

Total CAPEX by Project Type



Savings Cost [£/annum] by Project Type



Status	Total CAPEX	SFC award
Pre-Contract	£3,226,328	£3,226,328
Onsite	£1,721,652	£1,583,017
Complete	£386,582	£361,732
Part Complete	£20,833	£20,833
Total	£5,355,395	£5,191,910

University of Edinburgh SCF & SFC UCRF

Project Type	Count of Project Type	Total CAPEX	SCF Award	SFC award	Average of Simple Payback	Savings Cost [£/annum]	Savings GHG [TCO2/ annum]	Savings GHG [LT TCO2]	£ / TCO2e LT
Lab Equipment	20	£227,823	£181,011	£104,627	5.9	£67,221	140.3	1,375	£11,121
LED lighting	52	£2,100,374	£851,033	£1,204,672	8.5	£252,306	888.2	22,191	£4,913
Cooling	3	£181,400	£155,666		11.0	£25,700	62.2	889	£676
Lighting controls	4	£18,400	£15,100	£2,950	4.3	£5,122	19.0	168	£583
Renewable energy	4	£3,500,528	£274,200	£3,226,328	7.5	£371,273	1,164.9	25,737	£561
Boilers	4	£118,384	£118,384		7.7	£16,035	85.0	921	£535
Lab Ventilation	2	£277,610	£138,635	£138,975	8.4	£33,000	130.0	1,334	£208
Motor controls	1	£8,976		£8,976	6.6	£1,364	4.7	48	£188
Heating	1	£135,000	£60,200		17.1	£7,900	26.9	767	£176
Computers & IT solutions	2	£72,344	£22,686	£49,658	2.2	£68,341	42.1	758	£66
Transformers	1	£376,884		£376,884	4.5	£83,035	283.2	8,497	£44
Insulation - pipework	1	£102,000	£102,000		2.8	£37,000	179.0	4,028	£25
Ventilation	2	£15,570	£1,530	£14,040	0.5	£23,300	123.7	1,658	£16
		£64,800		£64,800	0.0	£0	0.0	0	£0
Total	97	£7,200,093	£1,920,445	£5,191,910		£991,598	3,149.1	68,369	

MAC (£/TCO2e LT)
£105

Simple Payback
7.3

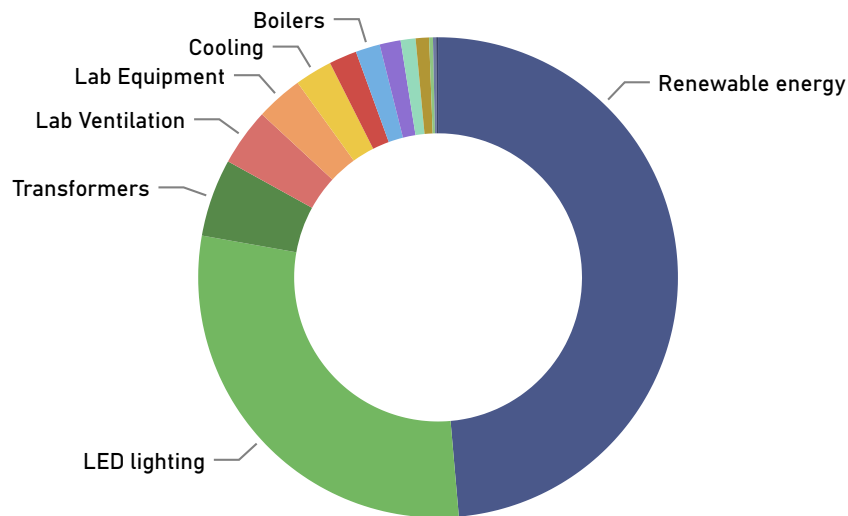
Funding Source

- SCF
- SFC UCRF

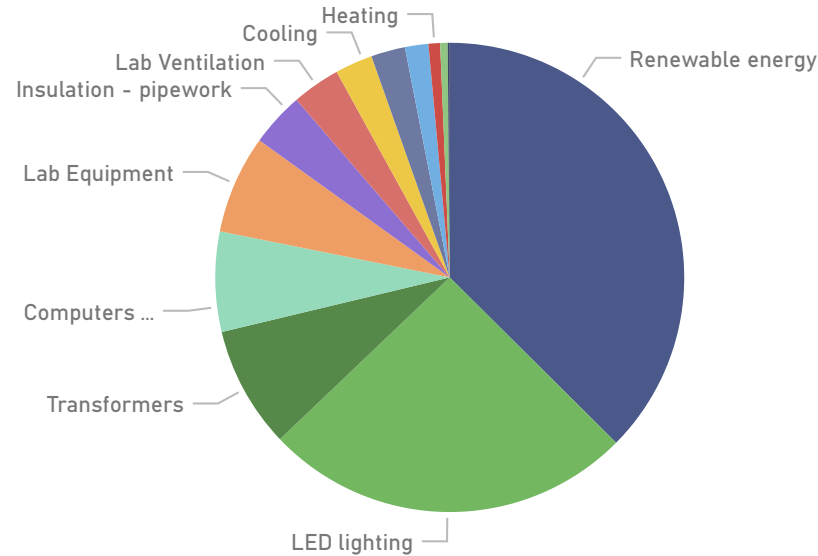
Status

- Select all
- Complete
- Onsite
- Part Complete
- Pre-Contract

Total CAPEX by Project Type



Savings Cost [£/annum] by Project Type



Status	Count of Status	Total CAPEX	SCF Award
Complete	44	£1,149,654	£629,158
Onsite	36	£2,463,045	£955,031
Pre-Contract	15	£3,515,402	£285,097
Part Complete	3	£71,992	£51,159
Total	98	£7,200,093	£1,920,445

Pipeline Projects Summary

Project Type	Total CAPEX	Average of Simple Payback	Savings Cost [£/annum]	Savings GHG [TCO2/ annum]	Savings GHG [LT TCO2]	Average of £ / TCO2e LT
Insulation - pipework	£350,000					
Motor replacement	£25,000	5.0	£5,000	17.0	255	£98
Cooling	£100,000	5.0	£20,000	70.0	1,011	£99
LED lighting	£2,976,306	9.1	£496,050	1,104.4	27,632	£119
Heating Control	£7,500	5.0	£1,500	8.9	61	£123
Lighting upgrades	£176,577	8.9	£22,600	71.5	1,429	£138
Renewable energy	£1,836,000	10.9	£142,150	443.8	9,985	£151
District Heating	£6,700,000	8.5	£700,000	2,400.0	39,000	£157
Heat Pump	£60,000	10.0	£6,000	17.1	288	£208
Heating	£1,000,000	5.0	£200,000	690.9	4,726	£212
Lab Ventilation	£4,800,000	9.5	£506,719	1,540.0	17,430	£275
Computers & IT solutions	£1,000,000	9.1	£110,000	246.0	3,444	£290
Lab Equipment	£375,029	6.9	£54,814	210.2	3,136	£418
Ventilation	£1,000,000	21.8	£45,800	65.0	494	£2,024
Total	£20,406,412		£2,310,633	6,884.7	108,891	

MAC (£/TCO2e LT)
£187

Simple Payback
8.8

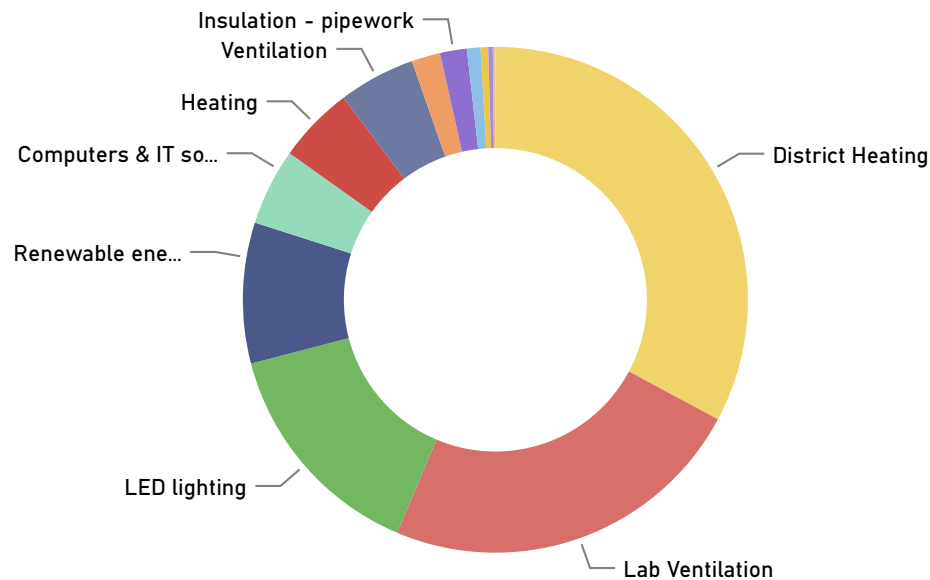
Funding Source

- Pending
- Pending - priority

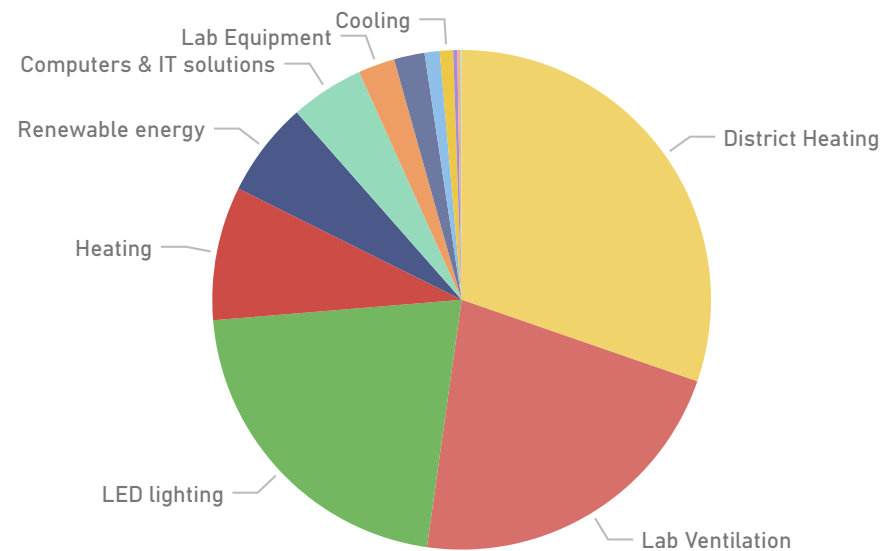
Status

- Select all
- (Blank)
- Cancelled
- Feasibility
- Onsite
- Pending
- Pre-Contract

Total CAPEX by Project Type



Savings Cost [£/annum] by Project Type





Sustainability Strategy Advisory Group (SSAG)

8 October 2019

SRS Programmes Report

Description of paper

The purpose of this paper is to update SSAG members on SRS Programmes 2018/19. It includes data to end of Q4 and some additional notes for Q1 2019/20.

Action requested

SSAG are asked to discuss the draft, provide comments. In addition, members are asked to consider if, within their own sphere of influence, they can encourage further participation in programme areas.

Background

The Department has continued to progress work against 7 priorities: carbon and energy savings; resource efficiency; supply chain SRS; responsible investment; localised advice and projects; community engagement and links to learning and teaching. We facilitate and manage programmes to catalyse action across the University and undertake work to support assessment and management of risks and opportunities. See

https://www.ed.ac.uk/files/atoms/files/srs_department_strategy_digital_low_res.pdf

Staff can access project reports and summarise on the Project Management website here:

<https://www.projects.ed.ac.uk/portfolio/srs>

We review our outcomes, outputs and inputs on a quarterly basis. The University measures performance in relation to carbon; energy; waste and recycling and other material sustainability issues. The purpose of this reporting is to be transparent and accountable on how the programmes of work facilitated and managed by the department are performing in relation to the strategic ambitions of the University.

Discussion

Annex 1 and 2 contain our Quarterly Report Summary Table and Infographic

Supporting the University Response to the Climate Emergency

The first quarter of this academic year kicked off with support from the team for University activity on the day of the climate strikes (20th September). Close to 300 people attended events and pop-ups around campus. Over 80k reached and over 2k engaged in online communications (i.e. 'likes' 'comments' 'shares'). Attendees expressed an appetite for the University to take more progressive action in response to the climate crisis: banning single-use items in catering, introducing carbon offsetting for flights or even a tax; embed SRS in all University courses. Specific feedback shared with relevant teams in SRS or Estates.

Energy Engagement and Communications

Over the last year, the Energy Engagement and Communications programme has sought to ensure that all staff and students have access to information and tools to reduce their energy impact at the University. 22 location audits were carried out identifying local savings and opportunities. 176 Energy Coordinators supported to identify savings in their areas. 83 projects have been approved for funding from the [Sustainable Campus Fund](#) estimated to bring annual

savings of over £520k and 1,600 tCO_{2e}. We will review next steps and future priorities with the Energy Office.

Sustainable Travel

The [Sustainable Travel Programme](#) faced some challenges in the implementation of the planned pilots but significant progress was made in building links with other universities. We launched the [Roundtable of Sustainable Academic Travel](#) and further refined our data collection and analysis and approach to reporting. We are now working on developing next steps for University action. There is increased senior leadership team appetite to identify appropriate next steps in this area. The project coordinators role has been extended.

Resource Efficiency and a Circular Economy

On [Resource Efficiency and a Circular Economy](#), we continue to work with others around the University. The introduction of the [latte levy](#) in 2018 resulted in a c37% reduction in single-use coffee cups in the last academic year. We launched the new campaign [#ZeroWasteUoE](#) in Q3 which continued to reach new audiences in Q4. The waste and reuse portal ([Warp It](#)) saved £289,000 in the year (£88k in the quarter). The [IT Reuse Project](#) resulted in close to 1,000 items reused (c50% with our community partner).

Fairness in Trade and Sustainable Procurement

For our work in [Fairness in Trade and Sustainable Procurement](#), a review was undertaken in relation to evolving international standards and benchmarks. The research Project '[Make ICT Fair](#)' project progressed with supply chain country research scoping visits by lead researcher in SSPS. A new University-wide [Palm Oil policy](#) was approved and communicated. Student placements undertook research on approaches to modern slavery due diligence, soya risks and supply chain monitoring.

Community Engagement

The Community Engagement Programme ([Edinburgh Local](#)) has supported 47 projects around Edinburgh with the financial support of £180,654. Over recent months there has been a range of engagement events including a mixer with grant recipients, a community showcase as well as stalls around the University to seek feedback and ideas in the further development of our strategy. A review of the [Digital Ambassadors project](#) and the Educate Edinburgh project was completed and new projects will be launched in the autumn. New social investment projects are in development.

Some projects on hold due to reduced capacity with a staff member on long term sick leave.

Sustainability at the Festival

The [Festival Sustainability Hub](#) was a key project in the last quarter of the year. This has helped to ensure there is a sustainability presence at the Fringe and provide a focal point for collaboration with partners on sustainability. An intern has been further investigating plastic waste and collaborative opportunities to address this.

Sustainability in the curriculum

Building on the success of the [Student Pathways](#) project whereby 50 students completed their Edinburgh Award on Climate Leadership or the SDGs we are now working to develop further opportunities for the Circular Economy. A PhD intern is undertaking a mapping exercise to look at the SDGs in the curriculum.

Sustainability Awards and Be Sustainable

The [Sustainability Awards](#) have drawn new interest from around the University by offices and labs who are looking for tools and approaches to implement actions in their areas. 38 teams were awarded in 2018/19 and we have 46 teams signed up for 19/20. Over 1,200 Staff and Students took the online '[Be Sustainable](#)' induction so far in the year with 6,000 sustainable

behaviour pledges made this year. Our learning and development course for staff ([Be Sustainable Advanced](#)) developed with [Learning for Sustainability Scotland](#), was piloted last year and a second intake started in June.

At the start of the new academic year we launched the new Staff and Student Sustainability Champions Network (see paper to SSAG in June 2019). The response has been extremely positive. With limited promotion we have had close to 300 people sign up. The first staff event had standing room only. There is increasingly willingness to get involved in action and moving from 'why' to 'how'.

Risk Management

The Department has recently reviewed and updated its risk register. Key risks relate to the response to the climate emergency; sustainable (business) travel; SRS in supply chains and community engagement. Mitigation in place and being actively reviewed and updated.

Equality & Diversity

Due consideration has been given to equality and diversity. We will continue to monitor issues within our programmes.

Next steps/implications

The Department is currently updating its strategy for 2020. The University has recently launched a new Strategy 2030 with a commitment to Zero Carbon and the Sustainable Development Goals. The wider University SRS Plan is to be reviewed in light of this as well.

Consultation

This report has been based on team and programme and project specific reports. Quarterly output and outcome reports are prepared for senior management and shared with other interested stakeholders.

Further information

Prepared by: Michelle Brown, Deputy Director of Social Responsibility & Sustainability and Head of SRS Programmes

Freedom of Information

This is an open paper.

SRS Department Internal Reporting

SUMMARY (August 2019)

Period: 4th Quarter 18/19

Prepared by Head of SRS Programmes for Director of SRS (more detailed reports available on specific areas)

Priority Themes	Sub Theme Programme Name	Related Department Indicators (BOLD = CSG Critical Success Factors)	Department Targets for 2020 (some further development required for areas)	2018/19 Progress at end of Q4
Carbon and Energy	Climate Policy and RELCO	<ul style="list-style-type: none"> Standards for new development Agreed approach to renewables/offset Co2 & energy targets 	<ul style="list-style-type: none"> Development standards agreed and in use Renewable and offset strategy and targets agreed 	Increasing stakeholder interest in response to Climate Emergency during quarter. High level engagement with University Senior Leadership Team on next steps. We are currently on track to deliver our 2025 targets (which are modest) but at risk of not meeting 2040 net zero commitments without a clear long-term plan. Carbon measurement and reporting progressing. Solar projects at Easter Bush progressing. Estates develop standards have been finalised and a summer intern has worked on the tool. Capital prioritisation potentially risking future low carbon and energy efficiency options. Opportunities for heat decarbonisation and the future of Combined Heat and Power as part of the Energy Masterplan being reviewed.
	Energy Engagement & Communications Programme	<ul style="list-style-type: none"> Contribution to Co2 & energy targets SCF performance #active champions Visibility of materials around campus + External awards for Energy and Carbon 	<ul style="list-style-type: none"> 1.8 M savings identified for 10 Percent target 675k annual savings through SCF by 2018 300 active Energy Coordinators by 2020 and SWITCH materials visible in every location by 2019 	Sustainable Campus Fund: 83 projects now approved and c£2.3M now allocated (including c400k contribution from Scottish Funding Council). Approved projects estimated to bring annual savings of over £520k and 1600tCO2e. Pipeline of opportunities in development and working with Estates Energy Office to look at prioritisation of future projects for the Campus Fund 19/20 and 20/21. Over the academic year, 22 location audits were carried out identifying local savings and opportunities. 176 (staff) Energy Coordinators supported to identify savings in their areas. New champions network is being launched to replace the previous energy and waste coordinator networks. Summer energy saving campaign rolled out. Joseph Black Building received the upgrade to fume cupboards in lab 29 which we hope will be the first of many labs.
	Sustainable Travel Programme	<ul style="list-style-type: none"> Sustainable Travel: reduction CO2 BAU 	<ul style="list-style-type: none"> 300 pledges for sustainable travel and 600tCO2e p.a saved 	Significant change to the University's approach to business travel has taken place in Q4, with the University's senior leadership team more aware of the growing concerns around University business travel emissions. There looks to be appetite for broader change to be developed. As this is being scoped at the minute, it has been decided that no further work should be undertaken towards setting up locations to test business travel emissions reduction measures until the broader University actions have been finalised.
Resource Efficiency	Resource Efficiency and Circular Economy Programme	<ul style="list-style-type: none"> Active users, money saved and waste avoided through Reuse Active staff champions 	<ul style="list-style-type: none"> 1000 active users by '19 and 500k saved via Warp-it 50 active coordinators Circular Economy Innovation Hub Network active 	Keep Cup project continues to result in c37% reduction in single use coffee cups in 18/19. SRS continues to work with ACE and EUSA and Waste on opportunities to reduce single use items and promote reuse. We launched the new campaign #ZeroWasteUoE in Q3 which continued to reach new audiences in Q4. The waste and reuse portal (warp-it) saved £289,000 in the year (£88k in quarter). The IT Reuse Project resulted in close to 1000 items reused (c50% with our community partner The Remakery on Leith Walk). There continues to be significant stakeholder interest and engagement around the CE Hub concept and the business case is being developed with Zero Waste Scotland.
Supply Chain SRS	Fairness in Trade and Sustainable Procurement Programme	<ul style="list-style-type: none"> Categories SPPT assessment has been completed # of suppliers engaged with on SRS issues #of positive changes in supply chains as a result of engagement (direct or via partnerships EW). . % staff with purchasing resp taken steps to increase their knowledge. 	<ul style="list-style-type: none"> 5 prioritised categories complete and issues raised embedded in procurement process 50% of spend suppliers engaged. Reporting of positive changes in supply chains as result of our work. 100% research needs identified through SPPTs addressed. 100% critical issues identified through SPPTs addressed -80% purchasing staff engaged reached 	Following the ISO benchmarking project, a Sustainable Procurement Group was set up in Procurement to take forward next steps. The Sustainable Procurement Prioritisation Tool (SPPT) and other guidance will be translated into a formal more suitable and usable for procurement category teams. The APUC supplier monitoring tool (SUSTAIN) pilot test project was completed with recommendations for next steps. Research Project 'Make ICT Fair' project progressed with supply chain country research scoping visits by lead researcher in SSPS. Palm Oil policy was approved and communicated. Student placements undertook research on approaches to modern slavery due diligence, soya risks and supply chain monitoring. A new Programme Manager was appointed who will be working closely with Procurement and other stakeholders on next steps.
Responsible Investment	Responsible Investment	<ul style="list-style-type: none"> Contribution to Responsible Investment 	<ul style="list-style-type: none"> Positive programme in place by 2019 Annual PRI reporting and minimum of 'B' on benchmarking 	Our approach to Responsible Investment was recognised with straight A's by the PRI (Principles of Responsible Investment) off the back of our recent report submission. Work was undertaken by investment committee consultants to review our own investments in relation to the Task Force on Climate Related Financial Disclosure (TCFD). Further work progressed in relation to new new social investment opportunities.

Awards and Learning & Development	Awards Programme Be Sustainable (training)	<ul style="list-style-type: none"> - staff in office, lab awards as percentage - effectiveness of project grants - Internal benchmarking Staff inductions include SRS at UoE 100% Staff L&D opportunities 	<ul style="list-style-type: none"> - % of staff participating in office, lab awards % of student residences and students participating - Internal benchmarking developed trialled, 100 % staff inductions include SRS Staff L&D opportunities 	The Sustainability Awards have drawn new interest from around the University by offices and labs who are looking for tools and approaches to implement actions in their areas. 38 teams were awarded in 2018/19 and we have 46 teams signed up for 19/20. Over 1200 Staff and Students took the online 'Be Sustainable' induction so far in the year with 6000 sustainable behaviour pledges made this year. Following the review of the staff online learning course (Be Sustainable Advanced) developed with Learning for Sustainability Scotland, a second intake started in June (focus on carbon, energy, and waste as well as social sustainability) with over 50 staff signed up.
Community/ Public Engagement &	Community Engagement Programme	People reached and awareness; Income generated; Active volunteers (staff and students); Local school partnerships; Support provided through grants; Student pathways; community of practice	100k people to be reached and 90% awareness (increase from 66% in 2014); 750k income generated; 6k staff and student volunteers active; all state schools partnerships; 150k disbursed through community grants; 100 students co-curricular pathways	Progress across some projects took place in the quarter. Some projects stalled due to stretched capacity with the Programme Manager on sick leave during the quarter. Cover for the Communications Manager was appointed (secondment from CSE). A Project Assistant was recruited for 6 months to support the Digital Ambassadors project and the Community Access to Rooms project. Some further work was undertaken to review progress against the current Community Engagement Strategy. Social media growth continues, especially on Instagram and Twitter. New networking events led to positive connections in the community and meetings are taking place with key contacts across the University to generate content. Members of the Community Engagement Programme Board (SRS/CAM/Estates/WP/Global) work collaboratively. There are opportunities for community benefits in procurement which need to be further developed.
Links to L&T	Student Experience, Learning and Research Events and Outreach	<ul style="list-style-type: none"> - Student learning opportunities for SRS - Researcher & Practitioner Living Labs for Programmes - Academic Participation in Programmes - Reach of communications campaigns and events 	<ul style="list-style-type: none"> - 10 % of staff and 15 % of new intake students reached - Uni SRS Standards (NUS Erasmus) Project successful - Quintuple digital presence from 2014 baseline - Living Lab toolkit in place - 5000 people annually in SRS events 	The Festival Sustainability Hub was a key project in the last quarter of the year. This has helped to ensure there is a visible sustainability presence at the Fringe and provide a focal point for collaboration with partners on sustainability. An intern has been further investigating plastic waste and collaborative opportunities to address this. A review of our other events support is currently being undertaken. Close to 3000 people attended our events in the last year. Following the decision to no longer support the Our Changing World events we have focussed on other opportunities for student engagement for semester 1. Building on the success of the Student Pathways project whereby 50 students completed their Edinburgh Award on Climate Leadership or the SDGs we are now working to develop further opportunities for the Circular Economy. A PhD intern is undertaking a mapping exercise to look at the SDGs in the curriculum.
Strategy and Reporting	-	<ul style="list-style-type: none"> - SRS Reporting on time and to required standard Items to committees get approval - Good Food Policy Implementation Plan 	<ul style="list-style-type: none"> - SRS Strategy signed off by 2018 - Annual Report signed off by committees - Actions taken as per Food Policy Implementation Plan 	SRS Plan awaiting formal launch to tie in with appropriate stages of University Strategic Plan. Work has commenced for annual reporting, gathering data from key stakeholders and updating the online reporting portal. SRS is working to support the integration of sustainability related reporting into the Annual Report and Accounts. Preliminary discussions with the Research Support Office to look at Sustainable Development Goals reporting in research. June SRS Committee endorsed participation in the Times Higher Education SDG ranking.
Our People, Systems	-	<ul style="list-style-type: none"> - IIP level. Staff L&D Strategies. - Funding and Income. - Fit for Purpose Office 	In place by 2017 (target of Silver). 100% staff have L&D plans aligned to strategy. £100k raised by 2020 for Dept and 500k for SRS in general. New office location during 2017	Sub group took forward work from the Investors in People Values Workshop to update our Department values and make recommendations on how we can further integrate into our work and management. Update to Department Strategy was paused but picking up again in August/September. Fundraising strategy has been reviewed. A successful event with Development & Alumni was held in June 2019 resulting in the establishment of a Sustainable Futures Fund and some interest from potential donors. Kames Capital approached dept. for support and consultancy (being managed by Ed Innovations)
Leadership & Partnership	-	<ul style="list-style-type: none"> - Partnerships developed. Active thought leadership demonstrated. International peer review and exchange. 	At least 5 academic papers published by 2020. International conference and peer review/exchange options reported on.	We continue to work with networks and leaders across sectors. Director of SRS sits on the International Sustainable Campus advisory board and the Responsible Universities Group (RUGs). Head of SRS Programmes sits on the EAUC (Environmental Association for Universities and Colleges). Business Travel academic paper finalised by Projects Coordinator. With a small grant from the ISCN and off the back of a previous visit, we are supporting capacity building in the Pontificia Universidad Católica de Chile as they develop their sustainability programmes in response to their Zero by 2038 climate strategy.

General Comments on Progress

Outputs and Outcomes highlighted in accompanying infographic

Progress made across all programmes and projects in the fourth quarter and throughout the year. Working with others to meet carbon and energy targets, increase reuse and recycling, support integration of social and environmental impacts within procurement and investments, deliver community engagement programme with partners. Reactive and unplanned but priority work has slowed down progress in some areas as has some recent sick leave. Parental leave temporary vacancies have created learning and development secondment opportunities for other staff in the department. In the first quarter of 2019/20 we are launching a new staff and student sustainability champions network to support sustainability leadership and action across the University.

Priorities in 2019/20 will be supporting the University's response to the Climate Emergency, continuing to progress carbon, waste and energy savings, working to enhance our social impact near and far (through our Community Engagement and Social Finance as well as SRS in Supply Chains work) and enhancing our support for the student experience.

The integration of the Sustainable Development Goals, local community commitments and Zero by 2040 in the University's new strategic plan will provide opportunities to enhance the University's positive impact.



£4.75m Sustainable Campus Fund
£2.3m allocated to date on low carbon and energy saving projects since 2016



1,600 tCO₂e savings
77 projects approved



£524,316 cash savings
Combined payback of 5.2 years



Energy saving campaign
176 Energy Coordinators; 5 Audits



55 institutions in Roundtable
Sector leading Business Travel Database



"Looking forward to starting the Be Sustainable Advanced summer course this week. We all need to take responsibility for the positive changes we want to see at work and at home. Thanks for this fab opportunity!"

Sanne Dijkstra-Downie, School of GeoSciences

#SRSChangemakers



Waste and Reuse

Expanding reuse around the University



£289,000 cash savings in 2018/19
16,000 kg waste avoided in 2018/19



985 PCs reused through IT reuse
50% internal reuse, 50% community reuse



Targeting single use items
37% single use coffee cup reduction in 2018/19



New #ZeroWasteUoE campaign launched
Targeting staff / students around the University

"I found [the Student Pathway] to be extremely engaging and helpful. The staff are very lovely and keen to hear your ideas..."



Laura Beth Young,
 Environmental Protection and Management MSc

Be Sustainable Advanced: 80 Staff

35% of staff reached by Awards

90% of departments include sustainability in staff inductions

116 staff completed Modern Slavery training

New Sustainability Champions network launched to support the University community to make positive changes in response to the climate emergency and global Sustainable Development Goals.

Edinburgh Award Pathways: 54 students

4 SRS Dissertations

8 Student Project Grants

25 student Digital Ambassadors

Positive social impact near and far



Make ICT Fair Research



Good Food policy supported



Fairtrade Accrediation (2 stars)



47 community projects and partnerships



£180,654 community grants



£1.5m committed with Big Issue Invest



577,585 web visitors (18/19)
 1,238 subscribers
 440 Instagram / 311 Facebook



THE UNIVERSITY of EDINBURGH



1,178 Instagram followers (950+ in year)

3,393 Facebook followers (100 in Q4)

4390 Twitter followers (290 in Q4)

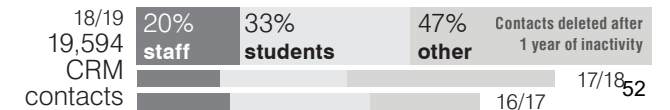


50,619 web visitors

7,857 subscribers



2,837 event attendees





Sustainability Strategy Advisory Group (SSAG)

8 October 2019

Estates Department Waste Office 2018/19 Report

Description of paper

This Paper summarises the University's performance within the academic and support estate for Waste during the academic year 1 August 2019 to 31 July 2019.

Action requested

This paper is for discussion and endorsement.

Recommendation

It is recommended that this report be made publically available.

Background and context

The University of Edinburgh Waste Strategy 2018/19 – 2022/23 was approved in October 2018. The Strategy sets out how The University of Edinburgh will achieve its vision to becoming a zero waste University by embedding Circular Economy thinking, and putting waste prevention, reuse and recycling at the forefront of our relationship with resources. This is the first time that the University has sought to take a strategic overview of waste management and it sets out waste management objectives and targets going forward

Discussion

Operational Changes

The Waste Office comprises six FTE members of staff (one FTE (Waste Assistant) was redeployed for medical reasons and a PAG has been submitted for a replacement). John Ingram joined as Waste Assistant Team Leader in August 2018.

Waste Management Performance (Academic and Support Estate Only)

In line with the targets set in the Waste Strategy, the Waste Annual Report will now include:

- Academic Estate (including waste from Accommodation, Catering and Events (ACE) retail catering).
- ACE Managed Student Accommodation at Pollock Halls (term-time arisings only (September to May inclusive)).
- ACE Managed Student Catering at Pollock Halls (term-time arisings only (September to May inclusive)).

The strategic targets for 2022/23 are detailed in the following tables, alongside performance from 2017/18 and 2018/19 noted (when the Waste Strategy was produced, data for 2017/18 was not available so could not be used as a baseline, and therefore the previous two years data has been given).

	Academic Estate	2017/18	2018/19
Waste reduction	10% reduction in waste arising per capita (FTE staff and students) from a baseline of 73 kg in 2016/17 to 66 kg.	66 kg (0%)	65 kg (-1.5%)
Reuse	Increase reuse rate to 10% against a 2016/17 baseline of 5%.	3%	4%
Recycling and composting¹	Increase recycling/composting rate to 80% against a 2016/17 baseline of 52%.	55%	53%
Composting/AD	Reduce food waste by 40% to 36 tonnes in 2022/23 (against a baseline of 60 tonnes in 2016/17).	78 tonnes	71 tonnes
Landfill diversion	Maintain percentage diverted from landfill at 99%.	99%	99%

	ACE Managed Student Accommodation at Pollock Halls	2017/18	2018/19
Waste reduction	10% reduction in waste arising per student from a baseline of 66 kg in 2016/17 to 59 kg.	71 kg (+5.6%)	85 kg (+28%)
Reuse	Reuse at least 90% of furniture and equipment resulting from accommodation refurbishments.	<i>At least 90% of furniture was reused through Bright Green Environmental Solutions.</i>	<i>At least 90% of furniture was reused through Bright Green Environmental Solutions.</i>
Recycling and composting	Increase recycling rate to 80% against a 2016/17 baseline of 41%.	52%	57%
Composting/AD	<i>Target not appropriate as food waste is not collected separately within student accommodation.</i>	N/A	N/A
Landfill diversion	Maintain percentage diverted from landfill at 99%.	99%	99%

	ACE Managed Student Catering at Pollock Halls	2017/18	2018/19
Waste reduction	10% reduction in waste arising per student from a baseline of 71 kg in 2016/17 to 63 kg.	90 kg (+26.8%)	96 kg (+35.2%)
Reuse	<i>Target not appropriate as no scope for reuse.</i>	N/A	N/A

¹ Includes anaerobic digestion.

	ACE Managed Student Catering at Pollock Halls	2017/18	2018/19
Recycling and composting	Increase recycling/composting rate to 80% against a 2016/17 baseline of 66%.	77%	78%
Composting/AD	Reduce food waste by 40% to 34 tonnes in 2022/23 (against a baseline of 57 tonnes in 2016/17).	81 tonnes	96 tonnes
Landfill diversion	Maintain percentage diverted from landfill at 99%.	99%	99%

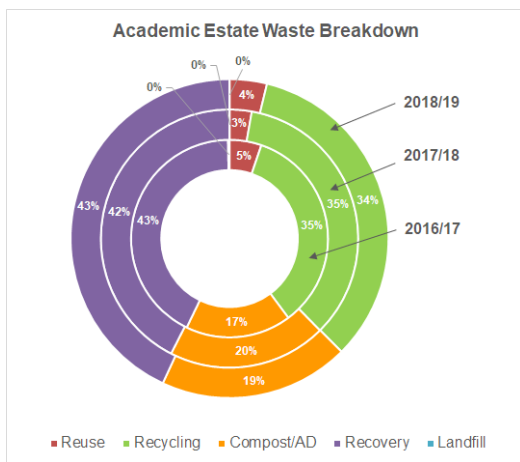
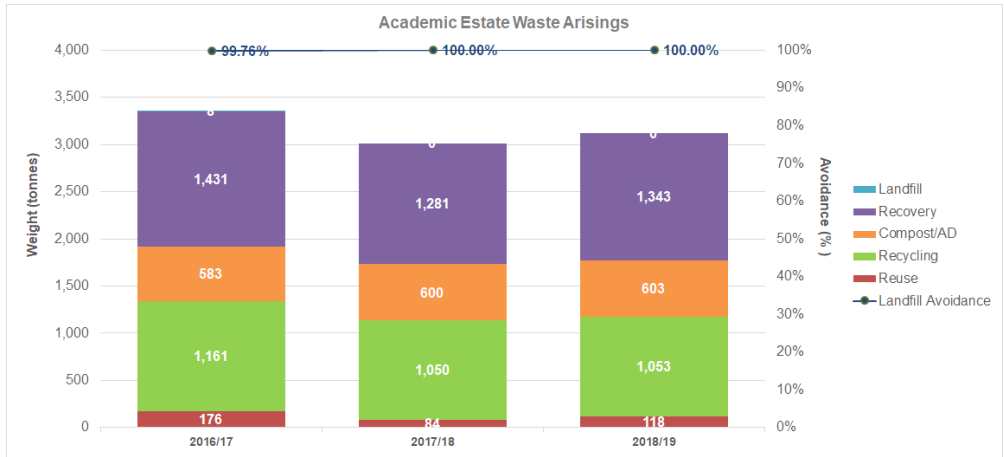
The remaining two targets apply to all and are as follows:

Sustainable procurement	Support improvement and innovation in supply chain waste to contribute to Scottish and global circular economy ambitions.	<i>Continue to work with Procurement and SRS to support this target.</i>
Sustainable estate development	Promote resource efficiency via the effective management and reduction of construction waste with targets specified, monitored and reported in site specific management plans.	<i>Continue to work with Estates Development to support this target.</i>

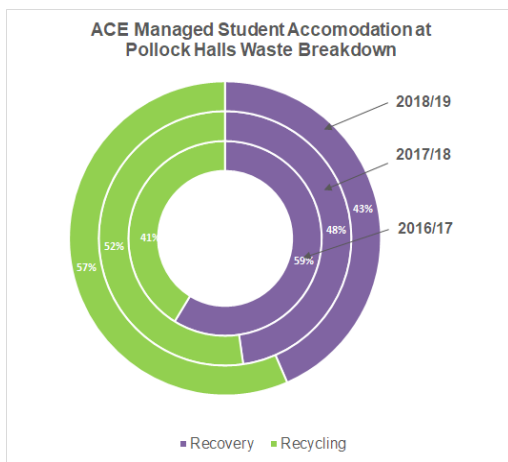
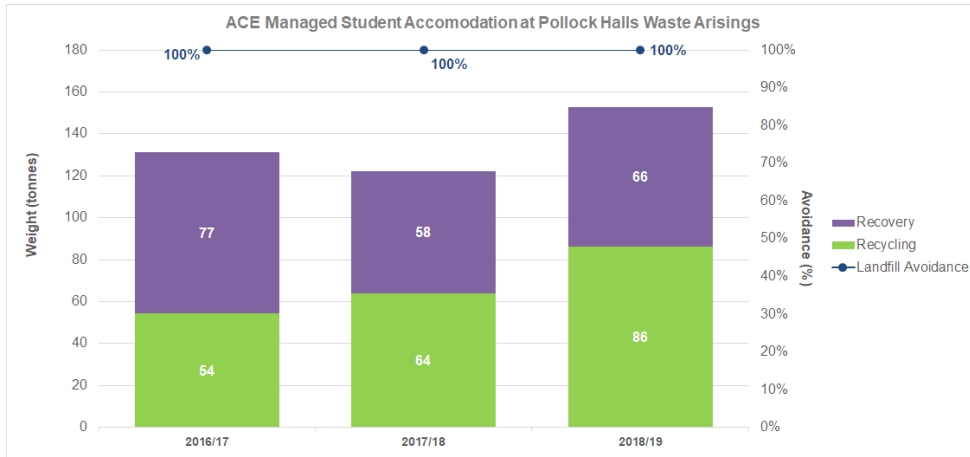
The targets set in the tables above are recognised as being ambitious and performance in 2017/18 and 2018/19 only reflects this. It is clear that there is the need for an added push to meet these targets by 2022/23. In association with the Department for Social Responsibility and Sustainability #ZeroWasteUoE was launched in July 2019. This is a new University-wide campaign to encourage staff and students to waste less, reuse more and recycle effectively. Communication and education is the key to meeting these targets and the Waste Office will work with the Department for SRS, EUSA and ACE to work to achieve these targets.

The following graphs illustrate the waste arisings from 2015/16 to 2018/19.

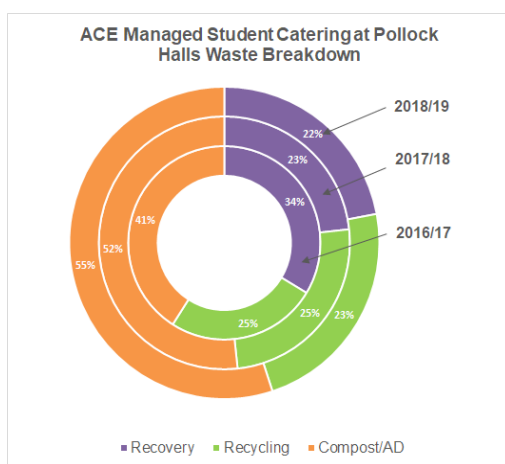
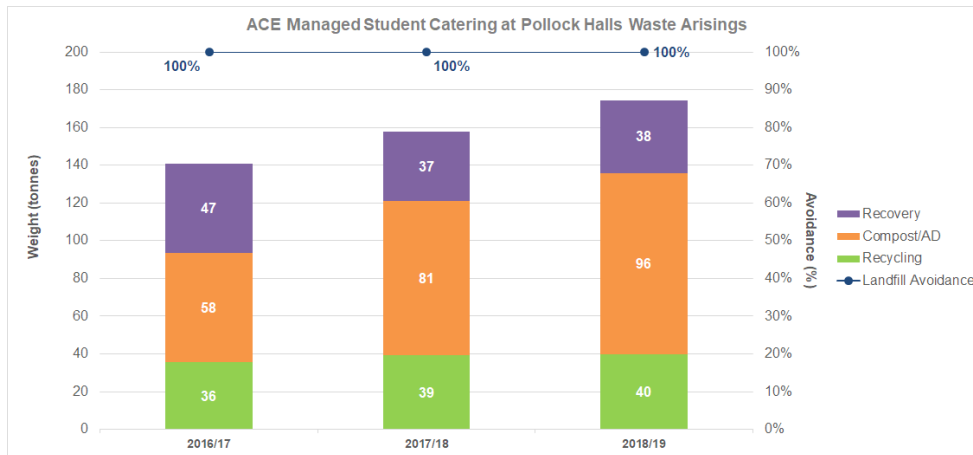
Academic Estate



ACE Managed Student Accomodation at Pollock Halls



ACE Managed Student Catering at Pollock Halls



The University produces approximately 3,500 tonnes of waste annually, and already undertakes numerous waste reduction and reuse initiatives. There is a commitment to encouraging and enabling the reuse of University-owned resources by helping staff and students locate and make further use of items which have been identified as redundant by their primary user group.

Within ACE managed student accommodation at Pollock Halls, as much equipment and furniture as possible is reused internally, and where this is not possible they have partnerships with local charities so that others can benefit from their waste. At the end of term, all students' waste is collected and stored over the summer months and offered free of charge to new students at the beginning of the academic year in a Free Shop. Any items not claimed in the Free Shop are redistributed to local charities.

There is an objective to provide means across the University to recycle and compost as many materials as possible in order to produce an output which is clean and free from food waste contamination, thereby providing a valuable resource for market recovery of plastics, metals, paper, card and glass.

The University already achieves a high diversion from landfill rate. General waste is collected by our waste contractor to produce RDF (refuse derived fuel) for use in energy recovery facilities, and therefore is diverted from landfill. Other wastes such as clinical and biological, radioactive, and hazardous, are collected via our licensed Contractors for further treatment.

In addition to the trends identified in the graphs above, the following was achieved in 2018/19:

- Our licensed WEEE contractor, CCL North Ltd, collected nearly 13,500 items of WEEE across the estate in 2018/19, which equates to approximately 120 tonnes. CCL North Ltd continue to focus on reuse, and in 2018/16 approximately 24% of WEEE was reused.
- Warp-it reuse portal saw 351 transactions (an increase from 332 transactions in 2017/18) saving approximately £280,000 (an increase of £80,000 from 2017/18), and 16 tonnes of avoided waste (an increase from 12 tonnes in 2017/18).
- The PC Reuse projects continues into its sixth year. Cost savings are estimated to be approximately £400k, not including the savings made from peripheral items such as monitors, keyboards, mice, etc. Work is in development to extend the project to include laptops and other devices such as IPads. Of the 2,912 desktop PCs reused as part of the project roughly half have stayed internally and the other half donated to selected partner, the social enterprise, Edinburgh Remakery. Funding for the project via the Sustainable Campus Fund means the work will continue until the end of 2020.

Major Projects/Achievements

- The new General Waste contract began in April 2019 and the incumbent supplier was successful (Biffa).
- The coffee ground collection scheme was rolled out to include all EUSA sites (in addition to ACE sites). In 2018/19 26 tonnes of coffee grounds were collected from across the University Estate to be made into a soil conditioner.
- Progression of protocol for redundant lab equipment (a collaborative project between Legal/Procurement/SRS/Waste); going to University Executive on 22 October.
- Waste website simplified.

Resource Implications

Current resource implications have been accounted for within existing staff (pending approval of PAG for a replacement Waste Assistant), and operational and equipment budgets included in departmental planning.

Risk Management

Key risks associated with implementation of waste management actions at the University include:

- The cost of waste disposal and recycling continues to rise outpacing the increase in staff and student numbers.
- Space to store and manage bulky wastes effectively is at a premium.
- Number of new developments/refurbishments and adequate provision for external bins in new developments.
- Estates projects to include management of building clearouts efficiently, and adequate consideration of waste management in refurbishments and new builds.
- Increase in requests for ad-hoc uplifts across the Estate which is putting pressure on the resources within the Waste Office; on multiple occasions external Contractors have had to be used. An increase in pallets across the Estate has also been realised, with the Waste Assistants uplifting approximately 100 per month.
- Waste arising during the Festival puts pressure on Waste Office and external cleaners; fly-tipping in the Central area, plus adequate storage for additional

external bins is a concern. The loss of Charles Street Lane where two compactors, and numerous bins are stored for use over the Festival, is a major concern for 2020. If this area is not available an alternative (accessible) area will need to be dedicated for waste management provision.

- Internally recharging for a number of services is time-consuming.

Equality & Diversity

No implications identified.

Next Steps/Implications

- Appointment of confidential waste contractor (after tender process in August/September 2019) (current contract extended until November 2019).
- Clinical and Biological Waste Guidelines.
- Procurement of hazardous, WEEE and radioactive waste contracts in order to ensure that the University remains compliant with procurement law and has appropriate, best value contracts.
- Waste Strategy (and associated Policies) to be drafted and approved.
- Identify further routes for reuse through working with contractors, social enterprises and our licensed WEEE contractor.
- New van to be used by Waste Assistants (will include tail-lift).
- Waste audit of general waste stream.
- Internal bin signage review (in collaboration with Biffa) to simplify recycling and maximise recycling rate.

Consultation

Further information

Author

Kate Fitzpatrick
Waste Manager
25 September 2019

Presenter

Grant Ferguson
Director of Estates Operations

Freedom of Information

This is an open paper.



Sustainability Strategy Advisory Group (SSAG)

October 2019

Travel & Transport Office Quarterly Report – October 2019

Description of paper

This Paper summarises activities of the Travel & Transport Office throughout 2018-19.

Action requested

SSAG are asked to note and discuss the paper.

Background and discussion

1. Introduction

This report presents a review of activities of the Travel & Transport Office throughout 2018-19. A number of sustainable travel projects were delivered in 2018-19, having successfully applied for £57k of external funding and securing a fully funded Campus Cycling Officer through Cycling Scotland. Significant progress was made on student bus travel, with the University Executive supporting a recommendation to remove the shuttle bus service and secure a cheaper Student Ridacard for all.

2. Bus Provision

KB Shuttle Bus Service: In 2018-19 the service carried 272,082 passenger journeys, costing £199,553 (100% funded by Estates). There was an 8% increase in recorded passenger journeys compared to 2017-18 (252,228). The service continued to demonstrate a consistent pattern of being unable to meet demand, leaving passengers behind in the early morning, lunch and afternoon peak times.

Following a review of the service during 2017-18, Lothian Buses recommended that an extra bus be added in, in order to address punctuality problems caused by increased traffic congestion (the alternative would have been to decrease the frequency of the service). This was agreed at an additional cost of £30k.

Service 41 £1 Offer: Throughout the academic year students and staff were able to board Lothian Buses Service 41 after 18.30, Mon-Fri and pay just £1 for travel between Potterrow and KB. The remaining £0.70 per passenger was paid for by the University. Over the academic year 2,226 passenger journeys using the offer were carried out at a cost of £1,558. 81% of the journeys were made from KB to Potterrow. This is a change to 2017-18, when 90% were made from KB to Potterrow and is likely to be because of an increase in marketing of the offer.

Bus Operations Analysis: In autumn 2018, Peter Brett Associates (PBA) were contracted by the University to undertake a Bus Operations Analysis: a University wide

review of public bus services, campus and residential connectivity, shuttle bus provision, ticketing options and benchmark these against other institutions. The analysis made recommendations for a sustainable approach to the provision of bus services for students as follows:

- Replacement of the King's Buildings' shuttle with a more equitable and environmentally friendly offer for commuting and general, non-urgent intercampus travel. This would see funding for the shuttle bus diverted to support a discounted student Lothian Buses ridacard and other potential fare reductions, potentially using the scope for increased staff travel by bus to provide a business incentive to Lothian Buses, as well as offering University support and expertise in business systems and research.
- an attractive, low price student offer for the Edinburgh city wide Just Eat cycle hire scheme, along with other active travel initiatives;
- improvement of the travel offer to Easter Bush, addressing capacity issues on service 67 and, if necessary, increasing funding to deliver a genuine alternative to the private car;

In May these recommendations were accepted by the University Executive who decided that from September 2019:

1. A deal would be agreed and implemented with Lothian Buses for a reduced price Student Ridacard;
2. The Shuttle Bus would cease operations;
3. All funding currently used to support student bus travel, including the shuttle bus, and subsidies paid to MVM students, would be reallocated to support a reduced price Student Ridacard available for all students;
4. A reduced price Just Eat Cycles membership (£40 (from £90)) would be made available to students and staff. This would not require University funding.

In July 2019, the Senior Leadership Team decided to defer actions 1-3 to September 2020, but action 4 was implemented for September 2019.

3. Just Eat Cycles

At the start of 2018-19, the Edinburgh Cycle Hire Scheme, operated by Serco and sponsored by Just Eat, was launched. This followed the University commencing a partnership at the start of 2017-18 with Transport for Edinburgh to support the procurement and delivery of a city-wide public cycle hire scheme. At the scheme launch 7 stations were implemented on the University Estate at: George Sq; Bristo Sq; Pollock Halls; King's Buildings (x4). Over the course of the last year the city-wide network has expanded from 30 to 71 stations with additional University Estate stations implemented at: Pollock Halls (now 2 stations); Crichton Street, and Riego Street (student accommodation). There are currently around 500 bikes available on-street. The Bristo Square station is consistently in the top 5 stations in the network (often at #1).



The scheme has experienced a number of technical and practical challenges during the first year that have seriously constrained growth of the scheme. The technical challenges are due to a combination of software and communication issues which are steadily being resolved. They have decided to move away from the use of virtual stations (the original business plan was for 70% of stations to be virtual) for a number of reasons including that bikes are easily toppling over and blocking footways, plus vandalism. Vandalism and theft has proved to be their greatest problem, necessitating a redesign of the fixed docking stations and the integrated locking arm on the bike.

Uptake by students and staff appears to have been low to date. The £40 (normally £90) annual pass "UniPass" has been negotiated with a minimal financial risk for the University and has launched for 2019-20 Welcome Week. Uptake of the pass will be reported to the University on a monthly basis.

4. **Cycling and walking (Active Travel)**

Cycle Friendly Campus Cycling Officer: We welcomed Marie Ferdelman to the department in August 2018 as a Cycling Scotland funded officer. Marie has provided the Transport Office with invaluable support on a range of cycling projects, many of which are described in detail below.

University Transport Guides: Paths for All provided £10k of match funding to the University to design and print two Transport Guides for new students and staff. This £20k project developed a map and sustainable travel information for the University overall, and for the King's Buildings. This has been accompanied by a redesign of significant parts of the Transport website, where the guides can also be downloaded: <https://www.ed.ac.uk/transport/welcome>. The guides have been distributed to all new students at Welcome Events and via the Schools.

Look Out For Each Other – Road Safety Campaign: As reported in the 2018 Annual Report the University partners with the Council, Lothian Buses, and Police Scotland to develop and deliver this road safety campaign to encourage cyclists to use lights at night. The campaign was delivered via websites, social media and local radio and supplemented by roadshows at the Meadows, King’s Buildings, Royal Infirmary, Western General, Napier and Heriot Watt University. Roadshows took the form of “hit squads” who approach cyclists without lights or bright clothing, giving them advice and providing free front and rear lights, snap reflectors and Hi-vis jackets.



Dr Bike: The University offers free basic bike mechanic services for students and staff at regular sessions across the Estate. This is a very popular and valued service. For 2018-19 the University partnered with The Bike Station and successfully applied for match funding from Paths for All. The £3000 budget for Dr Bike was more than doubled to an additional £8545 and increased the Dr Bike sessions from 32 to 46 per year and provided 18 free bike maintenance courses for 100 students and staff. The 46 Dr Bike sessions provided free maintenance and advice to over 550 students and staff. A similar funding application has been made for 2019-20.

The Security Office attends the majority of Dr Bike sessions in order to offer bike security advice, free bike security marking and the sale of D-locks to encourage cyclists to use high quality locks.

Cycle Friendly Employer Award – IGMM: Following investment in the existing IGMM bike store to increase capacity, and reflecting the existing shower and changing facilities and community of cyclists, the University achieved the Cycle Friendly Employer Award for the IGMM in early 2019.



Cycle parking and changing facilities:

- **George Square** - Our Cycling Officer Marie undertook a detailed audit of cycle parking facilities across the Central Area to identify gaps in provision. Using this evidence base Marie successfully applied for £17k of match funding from Cycling Scotland to deliver 44 cycle stands (88 spaces) around the south east corner of George Square. This funding has been matched with £9k of funding from the NI savings ring-fenced from the Cycle to Work Scheme.
- **IGMM cycle store** – the existing cycle store was not meeting demand and was poorly laid out. A successful application was made for £23k of match funding from Cycling Scotland, combined with £5k from IGMM to redesign the store using an innovative vertical cycle rack system and a maintenance station. This investment led to the achievement of Cycle Friendly Employer for IGMM.
- **Bristo Bike Store** – the bike store underneath the Bayes Centre received £8k of additional investment (from Cycle to Work NI Savings) to improve the changing facilities (provision of benches, mirrors, hairdryers) and provide signage.
- **Central Area cycle parking and changing facilities** - £20k of Cycle to Work NI savings has been allocated to deliver multiple projects to renovate and enhance existing cycle parking, shower and changing facilities. This project is ongoing.

City of Edinburgh Council plans: The University continues to be consulted by the Council regarding feasibility studies to further develop the city’s cycle route network. During 2018-19 the Transport Office engaged with consultations on:

- **Edinburgh City Centre Transformation**
- **Meadows to George Street Active Travel Route**
- **Low Emission Zones**

BioQuarter Active Travel Route: A key component of the BioQuarter Transport Strategy is the delivery of an active travel route from the city centre to the site. During 2018-19 a design has been prepared for a largely segregated cycle route alongside Old

Dalkeith Road. This will go to public consultation in late September 2019. The route will ultimately be delivered by the Council.

5. Connectivity

In autumn 2018 Peter Brett Associates were contracted by the University to undertake a Connectivity Analysis (alongside the Bus Operations Analysis). The study has focused on the assessment of connectivity between accommodation sites, King's Buildings and the Central Area, in order to identify and prioritise interventions for improvement. A "Connectivity Toolkit" is now under development which is being designed to be rolled out for all University campuses and large accommodation sites.

6. Car sharing

We continue to offer the online car share service – Tripshare. The University has a private group within Tripshare to enable students and staff to search for potential car shares within the University community. As of September 2019 we have 632 members (and increase of 16% in the last year). The main points in the year that the scheme was promoted was during parking permit re-application, and as part of University-wide communications on the threatened Lothian Buses strike.

7. University vehicle fleet carbon emissions

The Transport and Parking Office collate annual fuel consumption and mileage data from all University Vehicle Coordinators in order to calculate the carbon emissions of the University vehicle fleet. At the time of writing data for 2018-19 was still being collated. Collection and analysis will be complete by end of October 2019.

8. Work plan for 2019-20

The following key projects are to be delivered:

- 2019 Staff and Student Travel Survey (implemented Oct 2019, report by Feb 2020)
- Development of student bus ticketing product (delivered for Sep 2020)
- New Cycle to Work contract, incorporating increase in spend limit (currently limited to £1k) (new contract must be in place for Nov 19, increase in limit may come later)
- Cycle parking masterplan for Central Area and KB
- Just Eat Cycles docking station masterplan for the University
- Development on a Connectivity Toolkit to be used to support Estate Development decision making, and inform negotiations with CEC to develop significant improvements to cycle routes linking our main campuses.

Further information

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Freedom of information

This is an open paper.